

**Designing a practice-based, culturally sensitive model  
of health-patient education for hospital nurses to use  
in Saudi Arabia**

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**Table (i) list of abbreviations**

The abbreviation	Its meaning
H.E	Health Education
H.P.	Health Promotion
P.E.	Patient Education
MOH	Saudi Ministry of Health
N.P.P.M	Saudi Nursing Policy and Procedure Manual
WHO	World Health Organization
G.D.J.H.S	General Directorate of Al-Jouf Health Sector (local ministry)
TPE	Therapeutic Patient Education model

**Table (ii) definitions of terms**

The key term	Definition
Health Education	"A process of learning experiences directed towards a particular behaviour or problem with a focus on changing negative points of view, behaviour and beliefs of individuals and groups, which is important to improve the level of health and encourage people to embrace a lifestyle and practices compatible with long-term good health" (MoH, 2011c, p. 3).
Health Promotion	Health promotion is the process of enabling people to increase control over, and to improve, their health. It moves beyond a focus on individual behaviour towards a wide range of social and environmental interventions. (WHO, 2005, p. 1)
Culture	"The entire world of human interaction and behaviour. Communication is the means by which a culture is transmitted and preserved." (Giger & Davidhizar, 2002, p. 185),
Culture sensitivity	"Cultural sensitivity is a respectful attitude toward another culture". (Kim-Godwin et al. 2001, p. 920)
Practice-based	"An area situated between academia-led theoretical inquiries and research informed practice, and consists of a multitude of models of research explicitly conducted in, with, and/or for practice" (Furlong and Oancea, 2008, p. 6).
Competency	"Set of related knowledge, skills, attitude that enables an individual to actively perform the activities of given occupation or job function to the standard expected in employment" The International Board of Standards for Training, Performance and Instruction (IBSTPI) as cited

	Klein, (2004, p.14)
Practice-based, culturally sensitive health education model	<p>“A systematically organized educational framework that is built based on theoretical assumptions and evidence-based findings about practice-based and cultural sensitivity in health education. This aims to promote nursing education actions that use health education knowledge and skills to produce the most desirable health education outcomes in consideration of cultural sensitivity in care which should support hospital nurses in their delivery of health education, and dealing with challenges in the practice of health education in a hospital environment.” Ahmed Aldosh. (The researcher)</p>

## **The abstract**

This study aims to design a practice-based, culturally sensitive model of health education for hospital nurses. The theoretical and literature background to the meaning of practice-based, culturally sensitive models indicates that designing such models requires consideration of theoretical assumptions and evidence-based findings related to both health education practice and cultural sensitivity. Hence, the study has to use the study findings to create the final model design.

The study objectives that needed to be answered using mixed methods include: 1) Identify which health education skills are most valued by hospital nurses in Saudi Arabia; 2) Explore the self-perceived competence levels of Saudi hospital nurses when delivering health education; 3) Identify which aspects of health education knowledge are most valued by hospital nurses in Saudi Arabia; 4) Identify any organisational barriers that might impact on the delivery of health education in Saudi Arabian hospitals; 5) Identify any strategies that might impact on improving the delivery of culturally sensitive health education in Saudi hospitals.

The results have found several important skills and subjects of knowledge related to health education, low confidence levels for the majority of measured skills among nurses, the presence of culture, nursing, the workplace and educational barriers to health education practice, and also recommended several culturally sensitive strategies able to help to deal with Saudi cultural norms and values. Therefore, from the discussion of theoretical assumptions, literature and evidence-based findings of the study results, the final model is created and indicates that practice-based, culturally sensitive health education requires several interventions at two levels. The model consists of two dimensions including internal and external dimensions. The internal dimension reflects actions inside hospitals, which include continuous education, barrier removal and motivational interventions. Actions outside hospitals include updating nursing policies, cooperation with community organisations and use of the media.



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## **Chapter 1.**

### **Introduction to Saudi Arabia and the interface between socio-cultural issues, health and nursing.**

#### **1.1 Introduction**

The Kingdom of Saudi Arabia is a culturally unique country. Culturally, Saudi Arabia is Arab and Wahabi Islam. The country is well-known for its unique way of life which, in its own way, preserves its centuries-old heritage. Though the desert environment is not unique to Saudi Arabia, what makes Saudi culture so distinctive is the influence of Islamic values, which date back to the seventh century. Saudi Arabia was the birthplace of Islam and the basic Islamic values of Saudi culture have remained intact to this day (Long, 2005). Nowadays, Saudi Arabia is a multicultural country with one third of the total population of 29 million being expatriate workers (Central Department of Statistics and Indicators (CDSI), 2013).

The kingdom is known for having the largest reserves of petroleum in the world, making the country one of the wealthiest in the world (CDSI, 2013). The large oil industry and related wealth have changed life in the country, and this has led to a rapid transformation in the socioeconomic status of the population, as well as supporting improvements to its healthcare system and health status. This rapid development of, and increase in the population's income have, however, led to other problems for the Saudi healthcare system (Aboul Enein, 2002; Tumulty, 2001).

#### **1.2 Identifying the health care problems**

The key healthcare problems of Saudi Arabia have been identified by the World Health Organisation (WHO, 2013) as increases in non-communicable diseases and modifiable behavioural risk factors. These include tobacco use, physical inactivity and unhealthy diet. The prevalence of chronic non-communicable diseases, diabetes, hypertension, obesity and coronary artery disease is increasing. Hazzaa (2004) concluded a high prevalence (>43.3%) of physical inactivity among Saudi children and adults alike, Khatib (2004) reported high levels of overweight and obesity (64% to 70%). The prevalence of diabetes in adults is 23.7 % (Al-Nozha et al., 2004). Studies and reports (Al-Hazzaa, 2004; Al-Nozha et al., 2004; Khatib, 2004; Sharaf, 2010; WHO, 2006a, 2010) identified a sedentary lifestyle, lack of exercise and unhealthy dietary patterns as being responsible for the unwelcome shift in disease patterns in recent decades.

Given the impact of socioeconomic development on Saudi health status, health promotion could have a role to play regarding the previously reported health challenges, and it is also important to recognize the contribution made by individual and wider sociocultural values and beliefs to health promotion and health education. An important part of discussions to date in the Saudi literature, however, considers that in addition to health challenges, there is also an increasing link between health challenges and lifestyle and behavioural issues. This is because the health evidence suggests that the main health problems in Saudi Arabia have a relationship with behavioural and lifestyle issues (Aldossary et al., 2008; Farid et al., 2010; Midhet et al., 2010; Saudi Ministry Of Health [MoH], 2011; WHO, 2010).

Traditional medical practices remain widespread across the country (Al-Shahri, 2002), including the use of herbal medicines, cauterizing, dietary treatments, spiritual healing and cupping, in which local suction is created on the skin; practitioners believe this mobilizes the blood flow to promote healing (Aldosari, 2007). A study by Al-Saeedi et al. (2003) indicates that 15.6 % of Saudi diabetic patients believe that traditional herbal medicines are safe and effective for treating diabetes, 25.85 % believe that traditional healers are beneficial and 30 % of patients have used one or more traditional diabetic medicines. Al-Saeedi et al. (2003) indicated that traditional medical practices remain popular among Saudis, as they are taken up on the recommendations of friends or family members, which might reflect that the belief in and use of traditional herbal medicines is widespread among non-study participants.

Another example is that, culturally, girls are not allowed to play sports, as it is believed that they might lose their virginity by tearing their hymen (Human Rights Watch, 2012). Several studies (Al-Nozha et al. 2007; Alquaiz and Tayel, 2009; Shara, 2010) have concluded that cultural beliefs create barriers to the uptake of physical activity and increase the risk of other health concerns. Al-Shahrani and Al-Khaldi, (2011), Al-Shahri (2002), the MoH (2012a), and Rawas et al. (2011) consider that tackling disease and ill health requires due consideration to be given to cultural issues, as some health challenges are partly linked to complex cultural beliefs, which influence health behaviour.

### **1.3 Background to the Saudi Ministry of Health plans to enhance health education and health promotion**

To deal with previous health challenges, the Saudi Ministry of Health created a new strategic plan (MoH, 2012a) which focuses on health promotion and health education, which should be commensurate with Saudi culture. The MoH relies on nurses to implement the new strategic plan. As the largest group of healthcare workers in Saudi Arabia (MoH, 2012a), and as the largest group of healthcare professionals providing health education, nurses should be ideally placed to fulfil this role (Pelusi, 2007), and according to Whitehead (2008) healthcare settings often depend on nurses to implement the principles of health promotion and health education. Moreover, health education is largely considered a central part of nursing (Choi et al., 2010; Demir et al., 2009; Lamiani and Furey, 2009; Park, 2005). Designing culturally sensitive health education, however, requires careful consideration, as studies have found that lack of sufficient education and training are major factors influencing the knowledge and skill levels of nurses delivering health/patient education (Casey, 2007a; Cutilli, 2010; Farahani, et al., 2011; Lamiani and Furey, 2009; Pelusi, 2007). In addition, nurses require practical awareness of the challenges of health education and work environmental issues (Su et al., 2008).

Therefore, the MoH's strategic plan (MoH, 2012a) makes recommendations for investment in professional nurse education and training to help ensure that nurses are culturally sensitive and competent in the practice of health promotion and health education by constructing education models commensurate with the Saudi health system and being cognizant of the barriers and cultural norms within Saudi communities. The MoH provides overseas scholarships for health professionals, including the author of this research who has worked as a nurse educator in Saudi Arabia.

Therefore, the aim of this study is to design a practice-based, culturally sensitive model of health-patient education for hospital nurses. The target outcome behind developing this educational model is to achieve cultural competency in delivery of health education. To design such a model, however, it is important to begin by understanding the theoretical and philosophical perspectives in order to clarify the meaning of a

practice-based, cultural sensitive health education model. This is discussed in detail in the next chapter.

#### **1.4 Conclusion**

This study seeks to design a model that must better equip hospital nurses to be culturally competent to practise health education. It is important that the education model can function despite the changes and difficulties that arise because of the cultural beliefs and related sensitivity of the Saudi population. The model must, however, be based on the reality of practice and present conditions in order to succeed. The competency of health education would be an outcome of this educational model and the emergent original contribution to knowledge and professional practice.

## **Chapter 2.**

### **Practice-Based Health Education: Concepts, Values and Beliefs**

#### **2.1 Introduction**

This chapter explores the concepts, values and beliefs considered to be central to the development of this study and the development of a practice-based health education model. It discusses different meanings, concepts and theoretical and philosophical foundations of health and health education, and sets the scene for constructing a practice-based model. The relevance of the complexities created by ancient cultural beliefs about health in Saudi Arabia is examined in relation to the aims of this study. The philosophy behind health education and the need for good education are emphasized. Finally, the chapter discusses what constitutes a good model and the philosophy underpinning its creation; the researcher demonstrates how a health model can help to achieve the aim of this study.

#### **2.2 Complexities of a practice-based, culturally sensitive health education model**

Designing such a model is a complex research aim for several reasons. First, health education itself is a complex concept. It covers a wide range of issues, environmental, physical, social, emotional, intellectual, and the spiritual health of the patient, families, groups and communities (Donatelle, 2009; Robert, 2002). In addition, there are different descriptions and meanings, of health education (Whitehead, 2008). Moreover, there are some factors that may help or hinder understanding of the concept of practice-based health education. Those challenges relate to multiple definitions of health-related concepts, e.g. what do health, health education, practice-based and model mean? Therefore, the researcher considers it better to break down the different factors of the main research aim and explore and understand each one individually. These include: health in relation to health education, the meaning of cultural sensitivity, health education and its philosophy, the meaning of practice-based, and the meaning of model. Then, the chapter reveals how they relate to each other in order to draw a satisfactory conclusion about the meaning of a practice-based health education model.

### **2.2.1 Health in relation to health education**

Starting with definitions of health, Taylor and Renpenning (2011) state that there is no universally accepted definition of health, they claim that there is a wide range of definitions of health and each one has its own philosophy. A famous interpretation of health is however, Pender's definition. Pender et al. (2006, p. 23) define health as "the actualization of inherent and acquired human potential through goal-directed behaviours, competent self-care, and satisfying relations with others, while adjustments are needed to maintain a structural integrity and harmony with the relevant environment". Pender's model (2006) has a wider view of health, and this expanded view may impact greatly on and improve the client's health because it is not limited to the absence of disease, functional limitations or lack of adaptation. Hence, Peterson and Bredow (2009) suggest that Pender's definition of health views health as something broad, humanistic, positive and unifying.

The Saudi interpretation of health is of a concept that must be considered for this study. The MoH (2012a, p. 6) defines health as "a concept which is more than the absence of disease and illness. It is securing the safety of one's physical, mental and psychological health. Achieving health requires consideration of other health concepts, such as health promotion, health education, disease prevention and, lastly, treatment." This is similar to WHO's 1946 definition of health though there are differences.

In 1946, WHO defined health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (WHO, 2003, p. 1). Laverack (2007) mentioned that the WHO definition and concept of health is the official interpretation most commonly used for health promotion and health education practice. This definition has multiple dimensions of well-being which are part of health promotion and the practice of health education. These include physical, social and mental well-being, as well as the absence of illness. Physical well-being suggests the healthy functioning of the human body, biological normality, physical fitness and the capacity to perform tasks. Social well-being covers a wider scope of social responsibilities and issues, such as marital satisfaction, employability and interpersonal relationships. Mental well-being includes self-efficacy, subjectivity well-being, social inclusion and the ability of individuals to adapt to their environment and society. Hence, the WHO concept is that health should mean "complete health".

A point of similarity between the health definitions of Pender (2006), WHO and Saudi perspectives that all of them have comprehensive ideals. Üstün and Jakob (2005), however, argue and believe that the WHO definition of health has limitations. This is because it focuses on achieving complete health, which makes it very unlikely that anyone would or could be 'completely' healthy for a reasonable period of time. The definition is unrealistic, too idealistic, inflexible and utopian. Peterson and Bredow (2009) argue that one of the main advantages of these expanded definitions (WHO, 1984; Pender et al., 2006) is that they embrace broader social opportunities and responsibilities for nurses to assist and work with individuals, families and communities in order to promote improved health and a better quality of life.

This researcher sees that an important difference between the health definitions of Pender (2006), the WHO and Saudi Arabia lies in the approach that each definition uses in relation to health. WHO views health promotion as an outcome which is reflected in one's well-being, which is useful, but could be limited in its application as it does not make any concessions to individual ill health. The philosophy of Pender's definition of health is that it includes measures that are used to promote better health and these should take into account the patient or individual's own view of themselves and their lifestyle. For Pender (2006), health promotion is a tool that is used to achieve good health, while the Saudi interpretation sees health promotion as a basic factor of the concept of health since, in Saudi Arabia, some culturally-related health challenges, such as girls' sport, influence the desire for more health promotion and educational strategies which directly reflect the Saudi health concept; these factors underpin the importance of this study which seeks to devise culturally acceptable health education to promote better health.

Every individual's perception, however, represents different meanings for health. Laverack (2007) mentions that people consider or define health in functional terms, as their ability to carry out certain tasks, roles and responsibilities, rather than the absence of disease. These cultural differences, according to Chang et al. (2006), affect the individual's perception of illness, its causes and treatment. A person's social group may help that individual to recognize that they may have an illness, and hence encourage him or her to seek treatment. Also, what is normal health in one community may be challenging in another. Homosexuality is accepted in many societies, whilst in Saudi Arabia there are related socio-cultural and religious issues. It would be challenging to



discuss homosexuality within health education or health promotions strategies for these reasons. The homosexual individual potentially faces stigma, in Saudi Arabia, which in itself is another challenge. Psychological and mental illnesses are likewise stigmatized, and those affected may be hesitant or reluctant to seek medical advice. Hence, according to Chang et al. (2006) and Whitehead and Dahlgren (2007), the pursuit of "complete health" is socially and culturally constructed; again, this emphasizes the need for care when discussing health within Saudi society. These social and cultural factors, including theoretical dimensions of health, make it difficult to define health as a concept in its own right.

This researcher, however, realises that complete health may not be fully achieved through the Saudi healthcare system, even if it considers and uses effective strategies to that end. This is because Saudis, as Muslims, strongly believe that health and illness are simply in the hands of Allah (the God of Muslims), He is the one who provides a healthy life, and He is the one who can take it away. Allah says, in the Holy Quran (Muslims' holy book) (6:17), that "if God sends you harm, only He can remove it" (Loue and Sajatovic, 2012, part 11J, para, 7). This belief indicates why it is important to develop practice-based culturally sensitive model of health-patient education and to be able to develop culturally competent nurses willing and able to provide health education. Hence, there is a need to understand the concept of culture sensitivity.

### **2.2.2 The meaning of cultural sensitivity**

Cultural sensitivity has different philosophical meanings. According to Kim-Godwin et al. (2001, p. 920), "cultural sensitivity is a respectful attitude toward another culture". Wells (2000) also suggests that it is the integration of knowledge and awareness in individuals and institutional behaviours. Other authors, such as London (2008), view cultural sensitivity and culture competence as synonymous. Mahoney et al. (2006) see culture sensitivity as part of culture competence, and cultural competence as a large and comprehensive concept in healthcare. AlShehri (2002) summarizes this argument and states that cultural sensitivity, attitudes and cultural practices are more than just knowledge, they are factors that help in achieving the ultimate goal of providing quality cultural care.

As the final model has to be an educational document for nurses, and so the philosophy of cultural competency, which is the target outcome is of more practical use than cultural sensitivity. According to Cutilli (2006), the notion of being "culture sensitive" which has been used in nursing education is no longer suitable and must be replaced by "culture competence". Cutilli mentions that when 'a nurse' is "sensitive" to another culture, the implication is that the nurse's culture is superior or dominant, and therefore the nurse must be sensitive to an inferior 'other'. Conversely, "culture competence" means there is no superior culture; instead, nurses must be "competent" in or knowledgeable about cultural care practices when dealing with individuals from different cultural backgrounds, which accords better with modern thinking and the aims of this study. Change and Kelly (2007) agree and mention that a competent nurse is one who is able to develop cultural sensitivity and greater awareness and make use of knowledge related to the specific ethnicity, culture, gender and understanding of an individual's responses and their environment.

### **2.2.3 Health education and its philosophy**

Similar to health and cultural sensitivity, there are multiple definitions of health education, each with its own philosophy. The Joint Committee on Health Education and Promotion Terminology 2002 (Gold and Miner 2002, p. 6) defines health education as "any combination of planned learning experiences based on sound theories that provide individuals, groups and communities the opportunity to acquire information and the skills needed to make quality health decisions". Due to the strong impact of religion and culture in Saudi Arabia, however, the Saudi MoH's definition of health education (MoH, 2011c, p. 3) focuses more on people's beliefs and thinking. They define health education as "a process of learning experiences directed towards a particular behaviour or problem with a focus on changing negative points of view, behaviour and beliefs of individuals and groups, which is important to improve the level of health and encourage people to embrace a lifestyle and practices compatible with long-term good health".

Therefore, it seems there is a strong relation between health and health education. Theoretically, Randall and Downie (2006) describe the concept of health in relation to health education by introducing the idea of better health via persuasive and

philosophical ideas of health promotion devised to pursue optimal health, which is similar to Peterson and Bredow (2009). Further, it has been suggested that the role of health promotion and health education is to support the pursuit of well-being, which includes complete physical and mental health (Peterson and Bredow, 2009; Raingruber, 2013; Taylor and Renpenning, 2011). This is because health promotion and health education go beyond having a healthy lifestyle to encompass total well-being. This relation between health, health education and well-being leads to another view that health education can be described as "well-being education" (Shoqirat, 2009, p. 25).

Practically for Saudi Arabia, the relationship is more complex. Culture is an important element of health education planning. Also patient's cultural characteristics have implications for patient education. Farahani et al. (2008) consider that an individual's culture influences both their behaviour and way of learning. Change and Kelly (2007) believe that successful education planning must be linked to a nurse's knowledge of the client's cultural values, as patient behaviour in response to illness is influenced by culture and this will affect their acceptance of education. For instance, in some cultures, people think that illness is no longer present once the symptoms disappear (Change and Kelly, 2007). London (2008) agrees that health education has to be planned based on nurses' knowledge of cultural or religious beliefs and the linguistic and literacy skills of the community being studied.

Other authors believe that this relationship goes further. Mahoney et al. (2006) suggest that the relationship between health education and culture goes beyond regular health education practice and should focus on the self-management of illness by relying on the patient's culture to influence the mode of treatment. Freda (2004) and London (2008) both agree with a broader concept of cultural competency and patient education and state that the nurse should be culturally competent and know how to use evidence and knowledge to decide on his or her practice. Hence, there is need to clarify the meaning of practice base of health education.

#### **2.2.4\_The meaning of Practice-base**

A practice-based area is defined as "an area situated between academia-led theoretical inquiries and research informed practice, and consists of a multitude of models of research explicitly conducted in, with, and/or for practice" (Furlong and Oancea, 2008, p. 6). It requires prior knowledge or a theoretical background to begin properly but, to be developed, it requires further research using new findings to pursue practice development (McCormack et al., 2008). According to Furlong and Oancea (2008), however, the challenge of practice-based research is that the researcher has to mix different forms of knowledge, combining both their theoretical and practical claims. As a result, it might be possible to look at the practice base from a purely methodological perspective, but this may overlook its relationship to policy and practice.

The practice of health education is also linked to developments in the working environment. Bernd et al. (2009) suggest that a better working environment leads to better quality in the health educator's practice, as it encourages better performance and productivity outcomes from health practitioners, thus leading to better patient care outcomes. Conversely, an unsupportive environment may lead to adverse outcomes as it may affect healthcare workers physically. Feldman et al. (2011) claim that an increase in autonomy in the work environment would lead to better practice outcomes, but this would require a clear identification of the working environment and any barriers therein. Research can be used as a tool to identify them and thus manage and have control over the impact of those factors.

For this study, it is important to see practice-based health education within the domain of events and challenges in the field of practice, and what happens based on work reality. This is because the next chapter (literature review) indicates that the work environment and barriers are major themes that affect the practice of health education, and these factors have a major role to play in nursing practice and health education. Also, the practice-base is similar to the concept of 'best practice'. It is important to note that practice-based health education has to reflect the meaning of "best practice", as this is also a factor in the concept of health education. "Best practice" was defined as "nursing actions that produce the most desirable patient outcomes through scientific data" (Boswell and Cannon, 2011, p. 40). It is the collection of evidence that leads to

best practice in nurse-provided health education (Cottrell and McKenzie, 2011). Green (2008) mentioned that whenever evidence-based practice is involved, practice-based evidence is needed to make the research more relevant. Therefore, in this instance, this means that creating a “best practice-based” project of health/patient education cannot be undertaken without evidence-base findings relating to health-education practice conditions and work environments. Meaning this research as practice-based research has to investigate working conditions or environment in relation to health/patient education and has to include cultural issues in practice-based research. Therefore, the last issue that needs to be clarified is ‘model’ in this context.

### **2.2.5 The meaning of model**

The term ‘model’ can be described as theory in the early stages. It is eclectic, creative and simplified, with miniaturised concepts to address barriers. Model-creators try to build from their ideas a model, which may not yet have the empirical evidence from observation and experimentation that is required to represent the theoretical concept of the model. Models do not provide guidance for micro-level management, but they do provide guidance for planning at micro levels, such as what behaviour to target or what resources to tap into (Sharma and Romas, 2012).

The term "model" has as many different meanings and uses as there are theoretical and conceptual framework models of health education. Glanz et al. (2008) explain that models are designed to help give health education a framework, such as the health belief model, which is used to understand an individual’s adherence to a healthcare regimen and what influences their behavioural changes, and the trans-theoretical model, which shows the stages of this change.

There is a lack of consideration for the cultural competency standards of health education from the leading nursing and health education organizations (Pérez and Luquis, 2008), thus limiting the implications of those models as guidance for the cultural competency of health education. None of the current health education or promotion models offer a clear definition of a model. A model definition that is compatible with this research’s principal aim, which is to provide nurses with a

framework/guidance model, is Hoffart and Woods' (1996) "Professional Practice Model (PPM)". They define PPM as "a system (structure, process, and values) that supports the registered nurse's control over the delivery of nursing care and the environment in which care is delivered" (Hoffart and Wood, 1996, p. 354).

Therefore, from this chapter, at this point, the practice-based model is still a theoretical model consisting of two domains that include practice-based and cultural sensitivity. For the model to be a practice-based model, that this study intends to construct, there is a need to test the two domains in evidence-based research (Furlong and Oancea, 2008; McCormack et al., 2008). Therefore, the design of the desired model requires working on the three steps needed to create the final model design. The first step, already taken in this chapter, is to identify the main domains of theoretical assumptions (practice-based and cultural sensitivity).

The second step is the need to test the domains of the theoretical model (practice-based and cultural sensitivity) in evidence-based research and examine the findings. This requires two further steps. First, this has to be examined within a theoretical and conceptual framework, after the literature review chapter. This is very important to ensure that there is no gap between the literature review and the selected conceptual framework, and to ensure that the objectives of this study are determined based on consideration of both the literature review findings and the conceptual framework. The next step is to test the domains of the theoretical model in the methodology chapter and present the findings. The third step of creating the model is to use the study findings to create the final model.

As the intention is to design an educational model, it is therefore important to link and summarise the concepts used in this study in relation to practice-based culturally-sensitive education and training. Practice-based health education must reflect the knowledge and skills that nurses need to deliver health education, and the knowledge and skills needed to have control over and manage the practice of health education in hospital settings, which must also include knowledge of the work environment and its barriers and how to deal with those. Teaching cultural sensitivity as part of health education must reflect knowledge and awareness of culture-related issues, such as values, beliefs and norms that will lead educators (nurses) to have respect for culture, and knowledge of and skills in strategies and actions that support the provision of

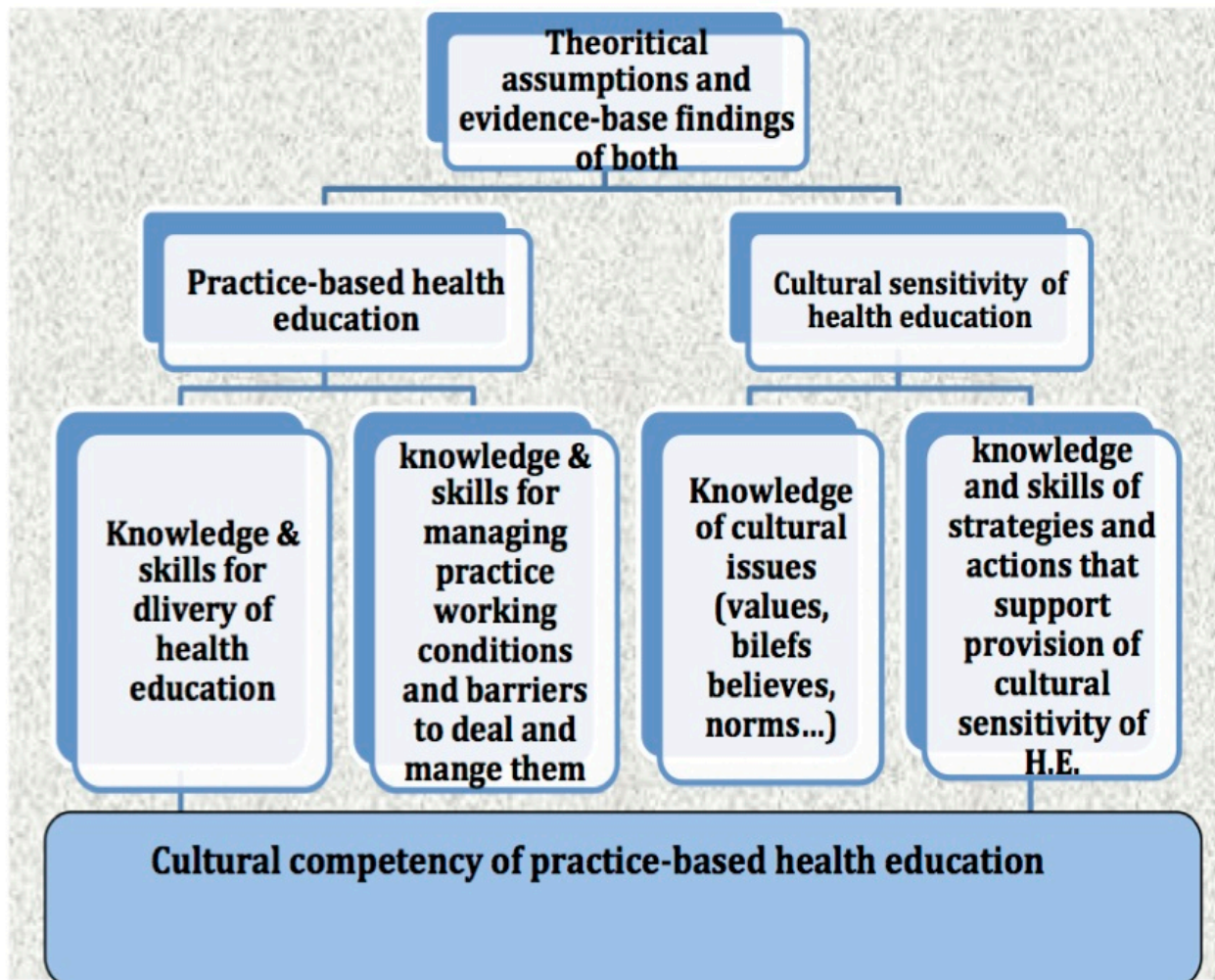
cultural sensitivity in health education. Taken together, these will lead to cultural competency in practice-based health education.

Therefore, as no definition of practice-based health education is found with goals or aims similar to those of this study, this researcher has devised a new definition, based on the exploration in this chapter, which will be used to inform the research study. The new definition is inspired by and based on a number of definitions, including Hoffart and Woods (1996) and Boswell and Cannon (2011). The used definition for this study is called "Practice-based Culturally Sensitive Health Education Model",

“This is a systematically organized educational framework that is built based on theoretical assumptions and evidence-base findings about practice-based and cultural sensitivity in health education. This aims to promote nursing education actions that use health education knowledge and skills to produce the most desirable health education outcomes in consideration of cultural sensitivity in care which should support hospital nurses in their delivery of health education, and dealing with challenges in the practice of health education in a hospital environment.”

As both the literature and the newly created definition indicate, it must be based on evidence-based practice findings, and so there is a need to explore the available literature about hospital nurses' practice of health education. The review should cover essential evidence-based information that describes nursing practice vis-a-vis health education in order to develop and evaluate it via education. Also the literature can help to reach an understanding of the practice of health education in light of cultural sensitivity in order to use this information to design a culturally sensitive educational model. This is discussed in detail in the next chapter. Figure 1, summarises only the theoretical assumptions of the practice-based health education model and how it should be summarised by this chapter

**Figure 1, shows theoretical assumptions of the practice-based of culturally sensitive health education**



### **2.3 Conclusion**

This chapter has explored concepts, values and beliefs that are considered central to the development of a practice-based health education model. The concepts and theoretical and philosophical foundations of health, health education and the practice base have been explored with an emphasis on the importance of creating a practice-based, culturally sensitive model of health education for use by hospital nurses. This should be a combination of practical and theoretical knowledge, giving consideration to cultural beliefs and values.



## **Chapter 3. Literature review**

### **3.1 Introduction**

The literature review was defined as “the identification and analysis or review of the literature and information related to what is intended to be studied” (Blanche and Durrheim, 2004, p. 480). This literature review chapter consists of three sections. Section 1 describes the search history and relevant literature used to inform the model design. The search strategy, sources and criteria for selection are explained and a synthesis table of the papers retained is included. Section 2 appraises the articles included as an evidence base using critical appraisal tools. Section 3 discusses the main themes of the literature.

### **3.2 Section1. Search history**

#### **3.2.1 Search strategy**

The search strategy was guided by Brettell and Grant (2004) which provides a search strategy for finding evidence related to professional practice. This includes starting by clearly defining key research and search aims, setting inclusion and exclusion criteria, identifying relevant sources, conducting a search based on clearly identified keywords, searching and filtering the results based on a systematic approach involving combining keywords to narrow down the results, reading abstracts to catch relevant articles. Therefore, as the aim of this research is to design a practice-based, culturally sensitive health education model for hospital nurses in Saudi Arabia, the aim of the literature search is to find relevant literature about cultural sensitivity in health education for hospital nurses in Saudi Arabia.

This search strategy was guided by four main principles. First, the previously discussed Saudi definition of health education (MoH, 2011c) is used as an operational definition for this study; however, learning experiences, such as patient education or health promotion educational activities, are considered within this definition of health education (Whitehead, 2008) and should be included. It is crucial that progress towards better quality care is inspired by a plan that promotes good relevant health education.

Secondly, as the purpose of this research study is to construct a culturally sensitive health education model for hospital nurses working in Saudi Arabia, the inclusion and

exclusion criteria have to support this conceptual approach by including relevant articles to meet the study aims. Thirdly, due to the differences between community or public nursing and hospital nursing, as reported by Hitchcock et al. (2003) and Basavanthappa (2008) discussing the boundaries of service, the articles have to be relevant to hospital nursing.

Lastly, the focus of this study is about health education in Saudi Arabia, but that does not mean that the study excludes non-Saudi literature, as this researcher is aware of the lack of Saudi literature and publications about health education due to a lack of support for research in Saudi Arabia, an issue identified by MoH (2012a). Therefore, the priority of this search strategy is the selection of articles primarily targeting issues discussed within the Saudi Arabian context. Then, it includes international literature if there is a lack of relevant articles within the Saudi context. Hence, the search strategy has three foci: Articles about hospital nurses' practice of health education, culture in relation to health education, Saudi nursing cultural practices. The databases are the primary sources for searching for articles. Table 1 shows the eight databases that were searched to find the included articles.

**Table 1A Databases used**

Databases used
1- Cumulative Index to Nursing and Allied Health Literature (CINAHL), 2- Medical Literature Analysis and Retrieval System Online (MEDLINE), 3- British Nursing Index, 4- ProQuest Nursing and Allied Health Science, 5- OVID Nursing Journal, 6- Cochrane Library, 7- National Center for Biotechnology Information (PubMed), 8- American Psychology Association database (PsycINFO).

### 3.2.2 Search process

The researcher has conducted two separate searches for two reasons. First, there are three foci of the study: articles about hospital nurses' practice of health education, culture in relation to health education, Saudi nursing cultural practices. These three foci can be categorized, based on the nature of relevant and linked keywords, into two categories. The linked keywords are health-education related, and culture is a linked keyword for Saudi nurses' cultural practices and culture in relation to health education. Secondly, the articles about hospital nurses' practice of health education required four

stages of exclusion, while the culture-related articles required seven exclusion steps; the researcher used the hospital keyword which was needed for hospital nurses' practice of health education which could limit the search results; especially, culture is largely omitted in health education related articles (Shoqirat, 2009), which was noticed by this researcher, hence, it required a separate focused search to find relevant literature. Therefore, the researcher conducted two similar searches in the search process, but their inclusion and exclusion criteria were different. The first search was conducted for articles on hospital nurses' practice of health education, as explained in figure 2 which shows a detailed matrix for the search process; Table 2 shows its inclusion and exclusion criteria, and Table 3 shows the keyword used,

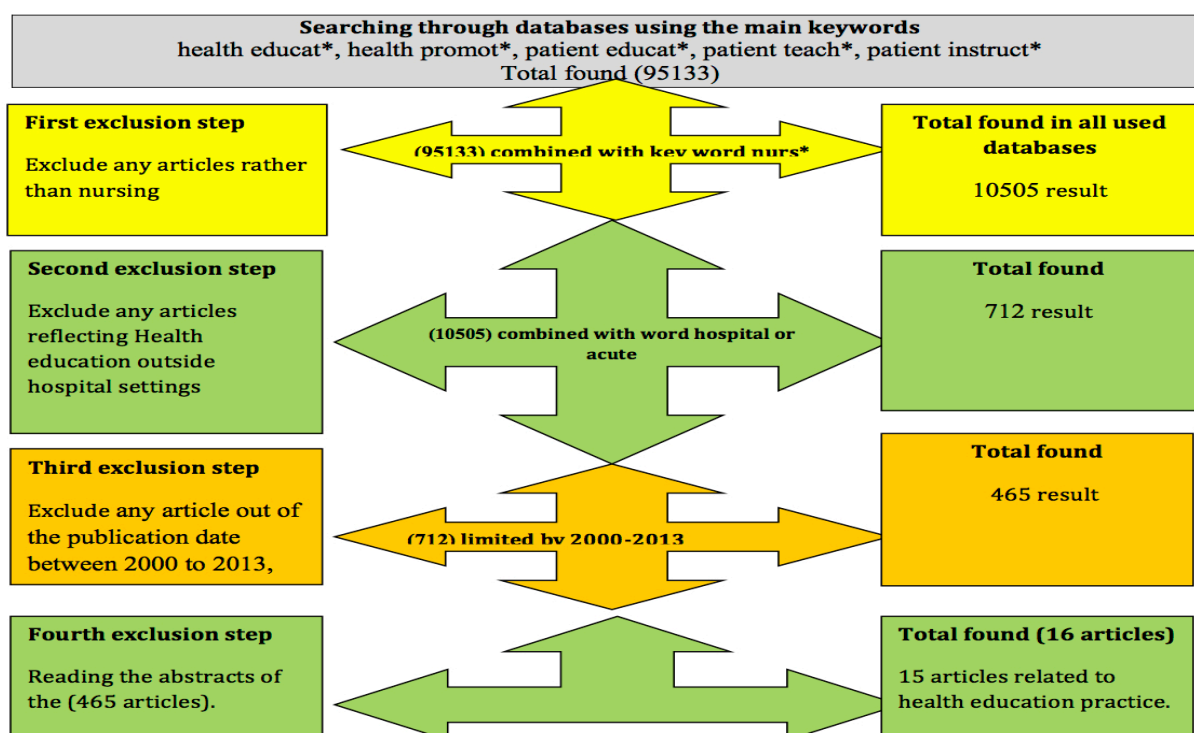
**Table 2 shows used keywords (The 1<sup>st</sup> search)**

<b>The main keyword used for hospital nurse practice of health education</b>
health educat*, health promot*, patient educat*, patient teach*, patient instruct*

**Table 3 shows the initial inclusion and exclusion criteria for hospital nurse practice of health education (The 1<sup>st</sup> search)**

<b>Exclusion criteria</b>	<b>Inclusion criteria</b>
1- Articles reflecting health education (H.E.) in specialties other than nursing; 2- Articles reflecting H.E for community or public health; 3- Articles not published between 2000 and 2013.	1- Articles that describe the hospital nurse's practice of health patient education;

**Figure 2 search process for hospital nurses practice of health education (The 1<sup>st</sup> search)**



### 3.2.3 The second search

The second search process was conducted for culture-related articles. This included a search for culture in relation to health education and Saudi nursing cultural practices. This search was controlled by the keyword culture table and inclusion and exclusion criteria (Table 4). As there are two foci, the researcher has separated culture in relation to health education (HE) from articles on Saudi nursing cultural practices in the third step. Both groups have exactly the same search process and both searches used the same main keywords. Figure 3 on the following page shows the systematic search process including seven stages of filtering, inclusion criteria, and keywords.

**Table 4 the inclusion and exclusion criteria for cultural related articles (the 2<sup>nd</sup> search)**

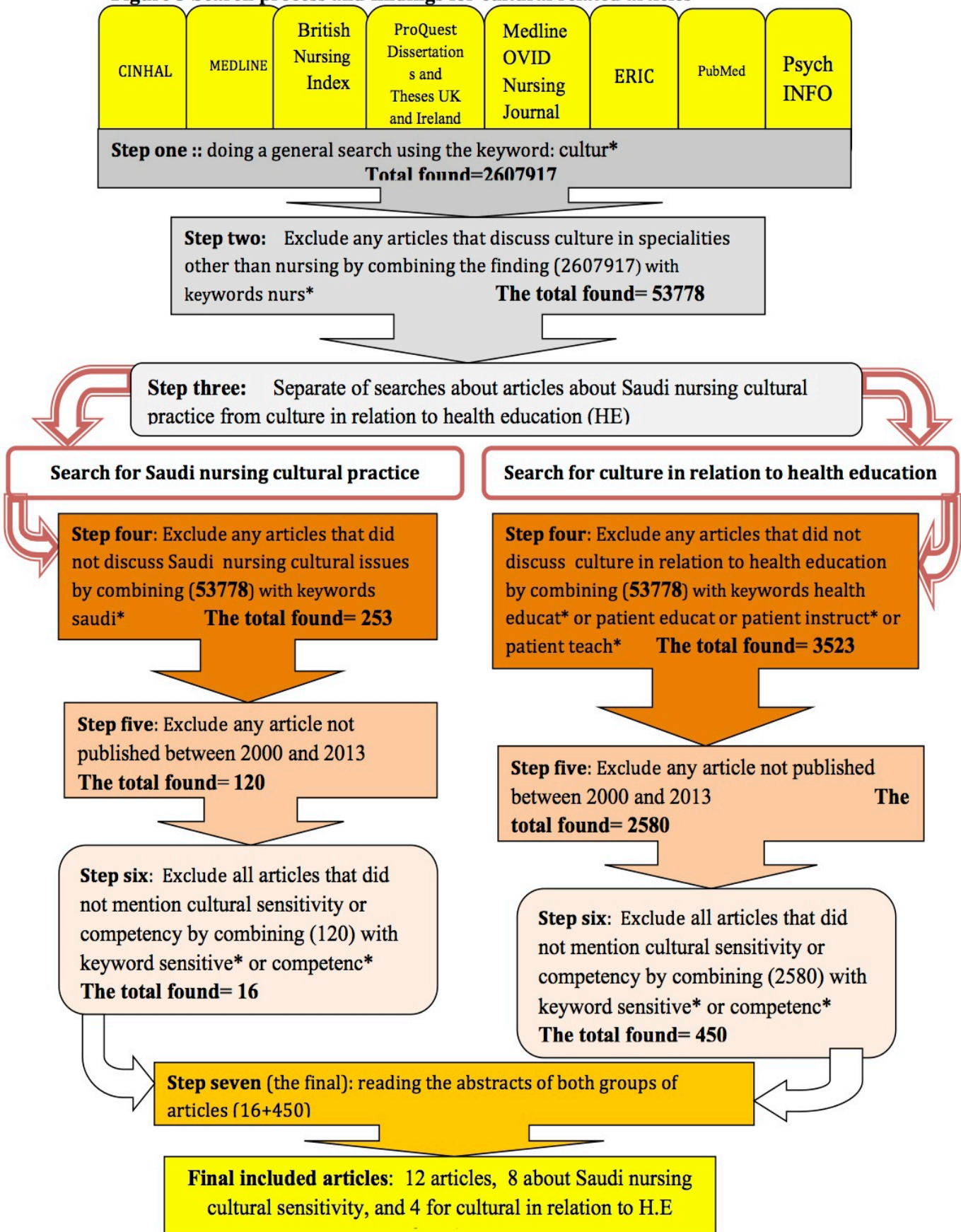
Exclusion criteria	Inclusion criteria
Articles reflecting cultural related articles in specialties other than nursing;	Articles discussing Saudi nursing cultural care practices or experiences;
Articles reflecting culture related articles for the community or public health	Articles describing culture in relation to health/patient education. Articles published between 2000 and 2013.

**Table 5 the keyword for cultural related articles (the 2<sup>nd</sup> search)**

The keyword for cultural related articles
Cultur*, ethnic*

**Figure 3 Search process and findings for cultural related articles**

Figure 3 Search process and findings for cultural related articles



### 3.2.4 Findings

Using the two searches shown above, the total of included articles stands at 27: 15 articles about hospital nurses' practice of health education (the first search process), and for the second search process, there are 8 articles that discuss culture in relation to health education, and 4 about Saudi nursing cultural practices and experiences. These include 18 studies and 9 reviews. There are, however, some issues with those articles. First, the articles included about hospital nurses' practice of health education reflect the diversity of international evidence more than they reflect the practice of health education in Saudi Arabia. They come from China (Whitehead, et al., 2008), Australia (Park, 2005), European studies in the UK (Kelly & Abraham, 2007), Ireland (Casey, 2007a), Finland (Kaariainen & Kyngas, 2010; Kelo et al., 2013; Koivunen, 2011) and Sweden (Bergh, 2012), plus only one Saudi study (Aldossary et al., 2012). On the other hand, this could be considered a positive aspect of this study as this diversity in the international literature and its findings reflect the need for health education beyond Saudi health education; hence, it may indirectly increase the generalizability and contribution of the study beyond Saudi Arabia.

Another point is that the expectation was that those studies should present evidence of different working regulations, policies and healthcare systems. Hence, it is not possible to compare nursing practice in other countries to that in Saudi Arabia as nursing policies and healthcare systems differ from country to country, and this is proven to affect the practice of health education (Albada et al., 2007). Considering the presence of articles related to Saudi nursing culture, the conclusion is that the articles included reflect Western studies covered by Eastern culture.

Secondly, the findings do not facilitate a systematic review. To conduct a systematic review, this must be done based on a clearly formulated question that has a particular focus on studies that are considered relevant in order to appraise their quality and summarize the evidence by use of an explicit methodology (Khan et al., 2003; Rousseau, 2012). This does not apply to this study as the relevant literature has three different questions or foci, which include: hospital nurses' practice of health education, culture in relation to health education and Saudi nursing cultural practices. Therefore, a systematic review cannot be conducted for this study.

Thirdly, despite the fact that the articles included have a common theme, due to their three different foci, some points are discussed at great length in studies but only superficially in others, which affects the level of discussion in the literature. Table 6, summarizes the studies included, while the reviews included and their main points and themes are listed in Table 7.

**Table 6 Summary of included studies.**

Title of study	Author(s)	Country of origin	Method	Sample size	Study strengths	Limitations of the study
The perceived health promotion practices of nurses in Saudi Arabia	Aldossary et al., 2012	Saudi Arabia	Quantitative Cross-sectional survey	Total 1,066. (Nurses (61.4%). Patients (30%). Doctors (12.0%).	Moderate internal validity  Appropriate study design  Valid measurement tool  Detailed presentation of findings	Weak sampling  Using of self-reporting technique  No differences in healthcare categories
Registered nurses' perceptions of conditions for patient education, focusing on organisational, environmental and professional cooperation aspects	Bergh et al., 2012	Sweden	Quantitative Cross-sectional survey	701 nurses	Ideal design and method  High response rate (83%)  Sampling is good.  Good discussion of findings	No specific limitations noticed
Nurses' perceptions of preoperative teaching for ambulatory surgical patients	Tse and So, 2008	Hong Kong	Quantitative Cross-sectional survey	91 nurses	Study design is good.  Retesting of validity and reliability of measurement tool	Small sample size  Limited external validity
Health promotion for people aged over 65 years in hospitals: nurses' perceptions of their role	Kelley and Abraham, 2007	UK	Quantitative Theory-based survey	72 (26%) of them are nursing assistants	Clear data findings with good discussion	Unclear study design.  Weak sampling
Evaluation of patient education from clinical nurses in Turkey	Avsar and Kasikçi, 2011	Turkey	Descriptive survey	176 nurses	Good size and sampling technique	Unclear study objectives  Inappropriate data collection tool  No information about validity considerations
Patient Education in Rural Community	Jones,	USA	Quantitative	273 nurses	Accepted validity level.	Validity of measures not

Hospitals: Registered Nurses' Attitudes and Degrees of Comfort	2010		survey		Correct method and design  Good sampling.	confirmed  Use of self-reporting technique  Mixing of findings and discussion
Integrating patient teaching into bedside patient care: a participant-observation study of hospital nurses	Barber-Parker, 2002	USA	Observation and focus group interviews	3 nurses	12 months of observations  Careful testing of observation tools	Small sample size  Weak discussion of findings
Nurses' roles in systematic patient education sessions in psychiatric nursing	Koivunen et al., 2011	Finland	Qualitative interviews	30 nurses	Appropriate study design and data collection  Good presentation of findings and rigorous discussion	Selection bias of participants
Nurses' Perceptions of Performance and Responsibility in Patient Education	Park, 2005	Australia	Mixed methods	114 nurses with 10 interviewed	Good design and ideal methods.  Good sampling  Good presentation of findings	Validity of measures not clear  Moderate discussion of findings
The quality of patient education evaluated by health personnel	Kaariaine and Kyngas, 2010	Finland	Quantitative survey	916 (93%) of them are nurses, 7% are physicians	Ideal design and methods  Valid measurement tools	Sampling has limitations  Confusion in the findings
Nurses' perceptions, understanding and experiences of health promotion	Casey, 2007	Eira	A single qualitative embedded case study	8 nurses	Good internal validity,  Ideal design  Rigorous discussion of findings	Weak sampling
Health promotion and health education practice: nurses' perceptions	Whitehead et al., 2008	China	Husserlian phenomenological approach using interviews	16 nurses (8 students and 8 senior nurses)	Good study design  Good data collection  Good discussion of findings	Weak sampling
Patient Education of Children and Their Families: Nurses' Experiences	Kelo et al., 2013	Finland	Qualitative interviews using critical incident technique	45 nurses	Appropriate method and design  Good justification of all study processes	Sampling limitations  The critical incident technique limits external validity
Nurses' roles in systematic patient education sessions in psychiatric	Koivunen et al., 2012	Finland	Qualitative interviews	30 nurses in a group discussion	Good design and appropriate method.  Data collection and	Possible sampling bias.



nursing					analysis well justified	
Nurse-related factors in the delivery of preoperative patient education	Fitzpatrick and Hyde, 2006	Ireland	Qualitative interview	12 nurses	The method is suitable for the purpose Concise presentation of findings.	Study focus and design not clear Small sample size
Caring for patients of Islamic denomination: critical care nurses' experiences in Saudi	Halligan, 2006	Saudi Arabia	Husserlian phenomenological description	6 nurses	Design and method ideal for study purpose. Good presentation and discussion of findings	Small sample size Recruiting not randomized
Cultural barriers in the education of cardiovascular disease patients in Iran	Farahani et al., 2012	Iran	Qualitative semi-structured interviews	18 nurses	Ideal study design Good sampling	Limits on external validity
An investigation into Saudi Arabian cultural knowledge among non-Muslim nurses working in obstetric units	Sidumo, 2007	Saudi Arabia	Quantitative , descriptive and exploratory design.	45 of 67 of total population	Appropriate method Valid measurement tool	Selection bias of sample. Findings need further clarification

**Table 7 Summary of the included reviews**

<b>Review title &amp; references</b>	<b>Country of origin &amp; references</b>	<b>Purpose</b>	<b>Main themes</b>	<b>Strengths</b>	<b>Limitations</b>
A multicultural nursing workforce and cultural perspectives in Saudi Arabia: An overview	Almutairian and McCarthy, (2012) Saudi Arabia	To provide an overview of cultural perspectives and practices in Saudi Arabia	Saudi culture values, norms Traditional & religious beliefs Cultural barriers (Gender segregation & language impact )	Good explanation of Saudi culture in relation to healthcare practice.	Mainly focuses on expatriate nurses in Saudi Arabia
Culturally Sensitive Caring for Saudi Patients.	Al-Shahri, (2002) Saudi Arabia	To provide information on caring for Arab and Muslim patients	Saudi cultural & religious values Cultural sensitivity practice	Culture in relation to health behaviours	Discussion of cultural sensitivity without providing a conceptual definition of it
Meeting the Challenge: Patient Education in a Diverse America.	London, 2008 USA	To show how to provide culturally competent patient education by assessment	Culture competency and assessment	Guidance in cultural competency assessment.	No discussion of the suggested guidance
Patient Education: Addressing Cultural Diversity	Change and Kelly,	To address cultural diversity and health literacy issues	Teaching-learning process	The relation between learning and	No specific

and Health Literacy Issues.	(2007) USA	related to cultural competency	Culture & patient education  Literacy and patient education	how culture influences it	
A Framework for Cultural Competence in Advanced Practice Psychiatric and Mental Health Education.	Mahoney et al., 2006  USA	To present a framework for addressing culturally competent psychiatric nursing	Cultural competency  Cultural competency learning demands	A framework for the implantation of cultural competency	Focus on psychiatric nursing
Do Your Patients Understand? Providing Culturally Congruent Patient Education.	Cutilli, 2006  USA	To provide information on transcultural nursing & strategies for working in cross-cultural situations	Transcultural models	Good discussion of transcultural models  Cross-cultural strategies for patient education	Mostly an American focus
Issues in patient education.	Freda, 2004  USA	To explore the needs of and barriers to cultural competence in patient education	Principles of patient education  Methods of teaching	A model for patient education in cultural competence	Mostly an American focus
Nurses/patient education work: conditional factors – an integrative review	Friberg et al., 2012  Sweden	To identify conditional factors for patient education and to identify foundational aspects of significance when designing studies on patient-education work	Nurses' beliefs and knowledge  The education environment  Healthcare organization	Systematic research process  Discussion of the quality of the included studies	The included articles reflect diversity in the categories of nurses (registered, specialized and nurse practitioners) without clarifying the differences
Personal contemporary observations of nursing care in Saudi Arabia.	Aboul-Enein, 2002  Saudi Arabia	To observe nursing care and the relationship between service provider and client	Saudi cultural issues  Barriers to cultural care  transcultural care	Discussion of cultural competence for nurses in Saudi Arabia	Discussion of competency without setting a conceptual definition for it

## **Section 2- Appraisal of the included studies**

### **3.3.1 Appraisal of the studies about Hospital nurse practice of health education**

This section will assess the suitability of the included studies as an evidence base using the Critical Appraisal Skills Program (CASP) (CASP, 2013). It will highlight the common themes discussed by each study. Their findings and common themes will be discussed in detail in the next section.

As there are similar strengths but different limitations amongst the included studies, and they have different levels of quality, some common principles need to be clarified. In quantitative studies, validity comes from the success or failure in achieving accuracy in the findings from the perspective of the researcher or participants (Creswell, 2003). According to Balnaves and Caputi (2001), this should include construct, internal and external validity. Construct validity is the extent to which the researcher can successfully construct and present the phenomenon of the study. Internal validity is the extent to which the research design allows conclusions to be drawn about the relations between variables. External validity is the extent to which the sample is genuinely representative of the sample population. Ihantola and Kihn (2011), however, consider that a mixed methods approach is more complex with regard to each method's validity and reliability as these can be affected by the observer effect, i.e. observer bias, researcher bias, data access limitations and the complexities and limitations of the human mind. Creswell (2003) argues that validity and reliability do not have the same connotations, the researcher has to assess the validity and reliability of qualitative and quantitative methods together, rather than each method alone.

The reliability in quantitative research refers to the reliability scores that have to be addressed prior to testing the study's validity. In quantitative research there is more focus on validity than reliability in order to determine that in numerical terms, the proof provided by the researcher and participants is accurate, can be trusted and is credible (Creswell and Clark, 2011). According to Tracy (2013), reliability is not applicable to qualitative research as it is in quantitative research, it is more about the trustworthiness, authenticity and credibility of the research.

The levels of validity and reliability among the studies vary. Four of the included studies are cross-sectional quantitative studies (see Table 6). Aldossary et al. (2012) is the only study to provide basic data about health promotion practices in Saudi Arabia. It aims to investigate the perceived health promotion practice of nurses in Saudi Arabia using a cross-sectional survey design; this, according to Brannon and Feist (2010, p. 26), is suited to the purpose of the study as the study stands on a comparison of the perceptions of the participants. The study measures both doctors' and patients' perceptions of the constraints on nurses and the responsibilities of nurses in health promotion practices. Andre (2002) however considers it inappropriate that others, such as physicians or patients, should be judging nurses' performance of care while they are unaware of nurses' role boundaries and job problems. This factor might threaten internal validity.

The validity of the measurement tool is based on content validity. Sproule (2009), however, believes that using additional sources to validate the evidence is also recommended. The findings describe factors which include: working conditions that influence the priorities of health education; factors that affect nurses when engaging in culturally sensitive health promotion; and factors that influence nurses' development of health promotion, such as their training or lack of it, and time constraints.

The findings of Aldossary et al. (2012) can be used by this study, and they apply locally in Saudi Arabia. It was conducted in Saudi hospitals where the working conditions are similar to those of the target participants in this study. The participants were working nurses and physicians in three categories of healthcare facilities (government, military, private). Alkurasani (2012) however notes that, in Saudi Arabia, those categories are very different in their operations systems, working conditions, responsibilities and staff satisfaction. Hence, without a clear presentation of the findings concerning such differences in these health facilities, which the study does not offer, the validity of the results might be affected. Considering the previously reported strengths and minor limitations, Aldossary et al. (2012) offer valuable results that reflect nursing practice in health promotion.

Bergh et al. (2012) describe the conditions for patient education, focusing on organisational and environmental aspects, and the differences between primary,

municipal and hospital care. The cross-sectional study design is suited to the focus of the study as the study focuses on examining whether a given population (of nurses) has been exposed to particular compounds or factors (environmental aspects) and what the level and range of exposure to those was (Schottenfeld and Fraumeni, 2006).

The instrument design was inspired by a cognitive interviewing technique, considers literature review findings, nurse interviews and expert reviews to ensure content validity. This approach is recommended to strengthen the study design and the validity of the data collection tools (Blaikie, 2010; Yaghmale, 2003). The use of single-item measures by this study to ensure internal consistency reliability means that Cronbach's alpha cannot be calculated (Lyberg, 1997). The sampling can be described as representative of the population and randomly stratified. This is because the population was divided into subgroups according to their characteristics (type of working facility); then, a random sample was taken from each stratum (Hulley, 2007).

The implications from Bergh et al. (2012) of this study include: nurses' practice as educators is affected by organizational and managerial factors and cooperation from others, and the development of practice has to consider those aspects. Also, nurses' educational practices depend on their knowledge and the culture of the workplace. The study findings appear to be eminently suitable for transfer as they are not limited to specific units or departments. Therefore, considering no serious limitation of this study, it should have valuable results to reflect nursing practice in health education.

Tse and So (2008) examine nurses' perceptions of providing preoperative information, and the factors that affect such teaching. The study design and measurement tool were obtained from a valid reliable study (Mordiffi et al., 2003), but it repeats validity considerations such as conducting a pilot study with reliability test scores ( $> 0.80$ ), which are acceptable scores (Thyer, 2010). The study recruited 91 nurses but sampling was not justified. The justification of the sampling is important to understand what the research aim is in relation to the findings. That understanding is essential to interpret the relevance of findings in relation to the population (Biau, et al., 2008; Suresh and Chandrashekara, 2012).

Conducting the study in only three departments dealing with surgical procedures means that the generalizability of its findings might be adversely affected. The results, however, have several implications for this study. These include: description of work-related factors and barriers affecting patient teaching; also, there are some training and supportive methods which offer guidance on patient teaching for nurses, which is useful for this study.

Kelley and Abraham (2007) aims to identify nurses' beliefs about health promotion and its delivery during the routine care of people aged over 65 years, so it considers nurses' role as health promoters. There is a challenge here, in that the study design is difficult to clarify. This is because the authors describe it as a theory-based study, but it appears to be a cross-sectional study making reference to a sample and the presentation of results. The study mainly stands on a comparison of the perceptions of a sample consisting of healthcare assistants and senior nurses, who are not a homogeneous category, which is reflected in the cross-sectional design (Brannon and Feist, 2010).

Another challenge is in consideration of the sample's inconsistency in its findings. There were 72 participants, of whom 47 were nurses, while others were healthcare assistants. Oliver (2006) mentions that nurses and healthcare assistants have different role responsibilities. As the study does not consider this difference, this inconsistency in the sample means that the results are a mixture of two heterogeneous groups (nurses and healthcare assistants), hence the findings may partially relevant to nurses.

The validity of the measurement tool cannot be confirmed. The authors do not mention considerations to ensure the instrument's validity, it was pilot tested on managers, not on staff nurses who represent actual participants. Also, no reliability tests are reported. The data collection process is reported, but the response rate was 41% which, according to Bryman (2012), is low and should not be accepted, but according to Ray (2012) it can be accepted because of the type of sample, the purpose of the study and the survey type used.

The results and implications of this study for design of a practice-based model are that nursing practice is affected by organizational barriers that impact on the routine provision of health promotion, for example, the authors raise training, resources and

management support as factors to consider when developing nursing practice. Also, nurses need to be confident and proficient in implementing health promotion. The findings' generalizability can be increased by repeating the study in general hospitals, because the data represents a sample from only one hospital specializing in care for the elderly.

Both Avsar and Kasikçi (2011) and Jones (2010) have similar limitations. Avsar and Kasikçi (2011) seek to determine nurses' practices of patient education in hospital clinics. The first limitations are the study's design and unclear focus. The study has a wider research aim, which is to evaluate nurses' current practices of patient education in hospital clinics. The study uses a questionnaire to answer the research question, but it may have been better to use interviews to this end. Gubrium and Holstein (2001) mentioned that qualitative interviews are better than a quantitative survey to obtain broader, more detailed information. On the other hand, when looking at the specific areas measured by the study, this is not mentioned as a study objective, therefore a questionnaire is appropriate. Hence, it is difficult to determine whether the selected method is appropriate or not for the study design.

Other limitations concern the validity and reliability. The questionnaire was developed based on literature review findings, but it does not appear to have been pilot tested, reviewed by experts, based on group discussions or tested for reliability. Miller (2011) advises that the two most important and fundamental characteristics of any measurement procedure are validity and reliability. Hence, the findings and capability of such a study to answer its research aim are questionable (Miller, 2011).

The sampling was properly managed, and all 176 nurses in three hospitals were recruited. The results are concise but discuss the pros and cons of the study findings, including their credibility. The findings have many implications for this study. They describe the nurse's role as one of systematic educator, they note the importance of the role of knowledge and skills in patient education and suggestions are made as to how the role should be developed. Also, a few of the working factors affecting the practice of education are identified. The study has high generalizability and the possibility of being used by this study, as it was not conducted in one specific unit.

Jones (2010) examines the variables that influence nurses' attitudes towards patient education and how those attitudes influence the delivery of patient education. The study used a survey to answer the research questions, which is correct according to Thomas et al. (2011) as the study questions concern status of the subject in the study.

There is no information to ensure the validity of the measurement tool. The study uses the questionnaire of Trocino et al.'s (1997). The author does not clarify the quality of the tools used. Heppner et al. (2008) state that the utility of descriptive research directly depends on the quality of the measurement tools. The sampling has challenges. The study recruited 273 nurses with a 63% response rate, which is a good rate (Groves et al., 2009). The recruitment of subjects was based on a self-reporting technique. Gideon (2012) mentioned that a major limitation of this technique is the absence of an interviewer, and so it depends on the respondent's understanding of the questions and the researcher's ability to clarify the answers. Hence, if a respondent is confused, which is possible, the results may include errors due to participant confusion (Gideon, 2012).

The main implication of this study's findings is that it identifies the relation between nurses' knowledge and experience and their practice and development of health education. Additionally, the findings can be used to target problem areas and guide the development of intervention strategies. This can inspire the model design in relation to how nurses should be educated to reflect the practice of health education. Moreover, the findings have high generalizability and can be applied locally in Saudi Arabia, as the study was conducted in five hospitals in rural areas, which resembles the data collection conditions of this study. There are, however, still some potential shortcomings of the study.

Barber-Parker (2002) explores the nature of patient teaching and the factors influencing patient teaching. The observational method is suitable for the study design with research questions selected to investigate the reality of practice in a natural setting (Carlson and Morrison, 2009). Also, the observations were based on the literature review's recommendations to minimize the confounding factors, and observer bias. As a result, the study has reliable results that represent the reality of hospital nurses' practice of health education.



In addition, the findings have implications for the design of a practice-based health education model; description of the actual role of health promotion as influenced by barriers, influences and environmental factors. There is a description of teaching tools and the types and techniques of patient teaching. The study recruited a small sample (nine nurses) and the sample type only reflects nurses from a specific unit (oncology care). Thus, the results may have limited transferability to other settings (Tashakkori and Teddlie, 2010). This problem however can be overcome by replicating the study with different populations, places and time periods (Carlson and Morrison, 2009).

Park (2005) is a mixed methods study. It examines nurses' performance in patient education in relation to their perceived responsibility and ability to prioritize patient education. The findings indicate that the author used interviews to validate the survey findings which is, according to Razzhavaikina (2007), one of the advantages of a mixed methods design. The sample of 114 participants are from the same category of the target population, though it is difficult to determine if they are representative of the population because there is no information about the recruitment process, data collection process or a sample power calculation.

The measurement tools were developed by combining instruments from Kruger (1987) and Martin (1988), though the study does not provide any details about the validity or reliability of these two sources. A pilot study was conducted by Park (2005) and content validity was assessed by two nurses, but the study does not clarify whether they are experts or not. Reliability test scores are not reported, hence it is difficult to confirm or rank the internal validity.

The findings for both methods are clear and supported and mutually confirmatory. The implication of Park (2005) for this study on designing a practice-based model is that competent nurses giving health education require a systematic approach that facilitates the inclusion of patient education into routine daily care. In addition, the levels of performance and competence are largely dependent on nurses' ability and skills in health education; the presence of workplace-related conditions and barriers compel nurses to reprioritize the practice of health education; and health education as a nursing practice requires prioritizing it as a primary responsibility to be developed.

The study has strengths and limitations, though it used a mixed-methods research approach whereby, according to Johnson & Christensen (2011), each method mitigates the other's limitations. Also, the generalizability of the study results could be examined from a quantitative perspective as the study used mixed methods (Benz & Newman, 2008). Hence, the study findings can be used and applied elsewhere, as they are not limited to specific units.

Kaariainen and Kyngas (2010) describe the quality of patient education as evaluated by health personnel. The design and study measurement tool are inspired by earlier literature about patient education. Macnee and McCabe (2007) emphasise the importance of research being supported by a literature review, which should be considered in the study design. The sample reflects the population of one hospital, and despite the large sample size of 916 participants, 93% of whom were nurses and 7% physicians, Kiger (2004) believes that nurses have different roles, responsibilities and perspective from physicians about health education, hence this small inconsistency between the groups may, according to Melnyk and Morrison-Beedy (2012), pose a threat to its internal validity, especially as the study findings do not separate nurses' and physicians' results from each other.

The validity of the measures were based on consideration of face, content and construct validity. Also, Cronbach's alpha is 0.63 to 0.92, which reflects a good level of internal consistency for the scale (Weiner, 2003). The data, however, were gathered using a self-reporting technique, which could have led to resulting errors as it depends on respondents' understanding and the researcher's ability to clarify (Gideon, 2012).

This study is relevant to the design of a practice based health education model. Planning for the competent nurse requires a combination of health personnel's views on patient education, knowledge of resources uses, and nurses' knowledge of how nurses conduct health education practice. In addition, the working conditions are factors that need to be considered in order to develop a practice based model of health education. Despite mixing the results of nurses and physicians, the findings can still be used by given that 7% (physicians' participation) might not reflect nurses' answers.

The qualitative studies have similar strengths and limitations. Casey (2007a) used a single embedded case study to present nurses' perceptions and understanding of health promotion in an acute setting. This method, according to Yin (2003), is a case-study type; it suits an environment where the boundaries between the phenomenon of interest, such as health promotion, and context are not clearly evident, as reported in this study. Eight nurses were recruited using non-randomized purposeful sampling. This sampling approach means that participants are selected according to their potential to ensure they provide as much rich and meaningful data as possible (Ross, 2012), thus this small sample may represent the population of nurses. Also, the study describes the data collection procedure and gives a presentation of information about the reality of health promotion. According to Klenke (2008), this indicates that this study has a good level of internal validity.

The study findings have several implications for this study. They identify several influencers, barriers, health promotion strategies and content which are used and required for real practice, and might also be used for an education project. The study's conclusion regarding the design of practice-based health education is that this supports and motivates the creation of a culture for health promotion that should help in developing the nursing practice of health education.

Therefore, the credibility of the study can be considered as established, as the study clearly explains the sampling strategy, uses the right methods and clarifies the analysis process. Regardless of that, in the view of Pitney and Parker (2009), the findings of case studies have only limited chances to be applied locally. Casey's study (2007) was conducted in general acute care units but does not present or discuss being limited to specialised units, meaning it can be applied locally and used by this study.

Whitehead et al. (2008) used a Husserlian phenomenological approach to explore nurses' perceptions of health promotion and health education practice. The study design suited the purpose of the study as this approach is used when little is known about a phenomenon or to describe the meaning of human experiences (Fitzpatrick & Kazer, 2006) using a first-person account in one-to-one interviews to describe the experiences of those involved (Steen and Roberts, 2011), which is what is explained by the study.

Sixteen nurses were recruited, eight of whom were students. Other studies, however, have found that students and staff nurses have different perspectives of health education and differences in the perceived experiences and barriers in both groups (Choi et al., 2009; Demir et al., 2009; Kaymakçi et al., 2007). Hence, this indicates that the participant sample was heterogeneous and might not be consistent, especially as the findings did not separate student findings from staff ones, which might threaten the internal validity.

The data collection and analysis are clear and based on a Husserlian phenomenological approach (Giorgi, 2000). The conclusion to be drawn from this study for developing a practice model are that health promotion requires empowerment, and nursing education of health education require support. Further research is indicated within other hospitals to endorse the findings.

Kelo et al. (2013) describe patient education sessions and nurses' traditional empowering behaviour in the education of children and their families. The study uses a critical incident technique as a qualitative method. This method suits the study design because it offers a practical step-by-step approach to collecting and analysing information about human behaviour and its significance (DeBrew, 2008; Shein and Chen, 2011). This was used by Kelo et al. (2013) to describe nursing practice in health education sections.

The study involved interviewing 45 nurses, but the sampling was not justified, which may weaken its internal validity (Biau et al., 2008; Suresh and Chandrashekara, 2012). Kelo et al. (2013) is the only study whose findings reflect the nursing role as a systematic health education process, describes empowering factors, and links nurse training and administrative support as factors that are needed in hospitals to enhance the practice of education.

The credibility of the study can be trusted as the study remained focused, shows confidence in the data processing and analysis, and addresses what was targeted (Polit and Hungler, 1999). The study used a critical incident technique, which is another approach to case studies (Wimmer and Dominick (2011), hence this method has its limitations given the restricted chances to apply it locally (Pitney and Parker, 2009).

This researcher sees a possibility to use and apply it locally, as the study focus, objectives and findings are not specifically presented for health education in specific units, though further studies in other areas would be beneficial to increase the chances to apply it locally.

Koivunen et al. (2011) seeks to understand nurses' expectations vis-à-vis their role in systematic education in a psychiatric inpatient care setting. The study's research design was suited to the purpose of the study as it used qualitative interviews to interpret or illuminate areas of nurses' role in patient education. Qualitative interviews are best suited to seeking an understanding of a particular area being researched (Holloway, 2005).

The study recruited 30 participants. The authors, Koivunen et al. (2011), mention, however, that there was some possible selection bias. The nurses who were interviewed may have been more positive about systematic patient education than those who did not participate. This bias, according to Thyer (2010), might diminish the internal validity, which could be partly overcome by randomization when recruiting the sample.

Data collection was based on a guidance protocol. Macnee and McCabe (2007) note that the trustworthiness of data may be supported by using a consistent collection protocol. The main implication of this study for planning an educational model is its use of a different workplace. The study describes nurses' complex role as health educators, including: Learner, Advisor, Collaborator, Teacher, Limiter. This differs from the roles mentioned by other studies, as it indicates a relation to nurses' knowledge and skills.

The main issues involved when judging the credibility of study are the focus of the study, selection of the context and participants, and the approach for gathering data (Graneheim and Lundman, 2004). As those issues were made clear, the study's credibility is noted but is affected by possible sample bias selection. Also, its relevance to this research could be limited. This is because Roche and Duffield (2010) compare the characteristics of the work environment in mental health to those in general acute inpatient nursing and find different aspects, including: staffing, resources, foundations,

and nursing leadership. Thus further research on other inpatient nursing departments would help to expand the application of the study findings.

Fitzpatrick and Hyde's study (2006) explored factors related to nursing that influence the delivery of preoperative patient education in a surgical context. The authors used qualitative in-depth interviews but do not justify why they did so, though other studies with similar aims that used surveys are discussed by them (Mordiffi et al., 2003). Grove et al. (2013) state that, in an exploratory qualitative study, the purpose should be clearly identified along with the aims of the study, unless the researcher wants to avoid a premature narrowing of the topic, which is not mentioned by the authors.

The sampling was justified, and 12 nurses were recruited. Both data collection and analysis were clear and described and based on Glaser's (1992) guidance. The results include a brief summary of the findings and mostly focus on presenting exactly what the interviewees said. The implications of Fitzpatrick and Hyde (2006) for this study are that practice-based health education is linked to the level of knowledge, the experience of individual nurses, the type of education provided, and a few organizational factors that affect nurses' role as educators. The study focuses on preoperative health education, and the implications of its findings mainly apply to preoperative health education and are partly used for general inpatient departments. Further research on other departments to expand the study findings beyond surgical departments and more justification of study choices are appropriate.

### **3.3.2 Appraisal of Culture-related studies**

Only three studies investigating nursing cultural care practices meet the inclusion criteria. Sidumo (2007) uses a descriptive explorative design to assess the Saudi Arabian cultural knowledge of non-Muslim nurses in order to construct an educational programme for them. The research design is suited to the research focus as it provides an accurate explanation of the characteristics of a particular individual, situation or group (Burns & Grove 2007), and some nursing research studies use this method to identify nurses' learning needs (Werley and Fitzpatrick, 1985).

The study recruited 45 nurses using a convenience sample comprising. The convenience sample comprising according to Bornstein (2010), is often used in cross-cultural studies, though it can lead to bias that threatens the internal validity of a study. As for the measurement tools, content, face and construct validity were considered and checked by independent experts, which according to Balnaves and Caputi (2001) indicates good validity of the measurement tool. Also, data collection and analysis are all described and justified.

The findings have several implications, which include: a description of the challenges of cultural sensitivity in care to multicultural healthcare providers, suggestions for the education that is required to satisfy cultural needs, and reflections on the enquiries of the nursing workforce in Saudi Arabia. Despite that, the study was conducted in the obstetrics unit of one hospital only, though it shares the same culture, hospital environment and multicultural nursing workforce with this study, meaning the generalizability of its findings is feasible.

Halligan (2006) describes critical care nurses' experiences of caring for patients of the Muslim denomination in Saudi Arabia. The study uses Husserlian phenomenological design because the enquiry focuses on nurses' experiences of caring, rather than on the nature of caring as perceived by them. Steen and Roberts (2011) endorse the use of qualitative interviews where the viewpoints and perceptions of participants are required, which coincides with the aim of this study.

The collection-tool process and analysis are justified and described. The sample includes six nurses but it is a non-probability purposive sample. Bailey (1994) mentions that when using such an approach, it cannot be claimed that such a sample is truly representative of a large population because the selection of subjects is based on the researcher's judgement about which subjects will facilitate his/her investigation.

The findings have implications for this research project. The study shows the impact of cultural differences in Saudi Arabia, the background of Saudi cultural values and beliefs, describes Saudi family and kinship ties, cultural and religious influences, and the nurse-patient relationship. Consideration of these issues as they relate to health education practice can give a clear picture of how culturally sensitive health education

can be. Bailey (1994) mentions that the type of sampling used affects the chance of applying study findings locally. This researcher believes that there were similar conditions that match those of this study, as both reflect Saudi culture and hospital multicultural nursing, thus the implications of this study findings can apply locally without restrictions.

Farahani et al. (2008) is an Iranian study, and Iran and Saudi Arabia share the same belief in Islam and certain cultural norms. The study aims to identify key issues and cultural factors that influence the education of cardiovascular patients using qualitative interviews. This method, according to Pickering (2008), is useful for identifying and understanding cultural issues, but the researcher has to be aware of the culture under investigation; Farahani et al. (2008) share the same culture and acknowledge this.

The study recruited 18 nurses, 4 physicians and 9 patients using a stratified purposive sampling technique. According to Tashakkori and Teddlie (2008), this is a random sampling technique involving taking a small sample population from a larger population, which gives more credibility to the study. One of its strengths is its conformability which is intended to assist in the validation of credibility. It is enhanced by member checking, time triangulation and the validation of emerging codes and categories in subsequent interviews and debriefing with two supervisors. Those steps, according to Speziale and Carpenter (2011), can increase the trustworthiness and credibility of qualitative studies

The findings' implications for designing a culturally-sensitive health-education model are various. The study presents information regarding the impact of culture on health education. This includes patients' lifestyles, beliefs about disease and treatment, cultural beliefs regarding preferred patient educators and the role of communication. The similar cultural challenges to and beliefs of the study, which are similar to the Saudi Arabian case, increase the ability to use and apply its findings locally. The study has strengths that elevate its trustworthiness, and include: consideration of credibility, high transferability and conformability of the findings by triangulation.

Therefore, the overall quality of all the studies included (studies about hospital nurses' practice of health education, cultural related studies) as an evidence base varies



between studies with clear limitations which could affect their validity (Avsar and Kasikçi, 2011; Jones, 2010; Kelly and Abraham, 2007), studies with some limitations that do not affect their validity (Aldossary et al., 2012; Fitzpatrick and Hyde, 2006; Halligan, 2006; Park, 2005; Whitehead et al., 2008) and studies with very minor limitations that do not affect their validity (Barber-Parker, 2002; Bergh, 2012; Casey, 2007a; Farahani et al., 2008; Kaariainen and Kyngas, 2010; Kelo et al., 2013; Sidumo, 2007).

The following section will discuss the identifying shared themes. These themes summarised in table (8), emerged from the previous included studies, and from analysis of the included reviews. The researcher however, combines some themes based on the need of the study. One of the identified themes is about nursing practice of health education, and the other is nursing practice of cultural care. The researcher highlighted similar themes with the same colours and arranged similar themes under each other for easier comparison. Also, the researcher combines both themes as one theme in order to identify nursing cultural sensitive practice of health education, which is needed to create the model. Also, themes of training, and role of knowledge and skills were combined into learning needs of cultural sensitive health education. Therefore, the main identified themes of the literature include: the nursing role/practice of cultural sensitive health education, the working and organizational factors affect cultural sensitivity and health education, nursing learning needs for both health education and cultural sensitivity.

**Table (8) summarises the main identified themes of the included studies.**

Study	Theme 1	Theme 2	Theme 3	Theme 4
Bergh et al. (2012)	Nursing role/practice of health education	Workplace/ organizational conditions & barriers	Staff training	Role of knowledge and skills in H.E.
Tse and So (2008)	Nursing role/practice of health education	Barriers to health education	Factors influencing H.E., including training	Methods of delivery of health education
Kelley & Abraham (2007)	Nursing role/practice of health education	Some organizational barriers to H.E.	Learning/training needs in health education	Knowledge & skills in health education
Avsar and Kasikçi	Nursing role/practice of	Some organizational	N/A	Knowledge, skills

(2011)	health education	barriers to H.E.		& experience
Jones (2010)	Nursing role/practice of health education	Organizational barriers to H.E.	Training role in health education	N/A
Barber-Parker (2002)	Nursing role/practice of health education	Barriers to H.E.	Facilitators of H.E., including training	Knowledge of H.E.
Kaariainen and Kyngas (2010)	Nursing role/practice of health education	Organizational barriers to H.E.	Training role in health education	Knowledge & skills in health education
Casey (2007)	Nursing role/practice of health promotion	Organizational barriers to health promotion	Facilitators of health promotion + training	Understanding of health promotion
Whitehead et al. 2008	Nursing role/practice of health education	Barriers to health promotion	Role of polices in health promotion	Role of knowledge and skills
Kelo et al. (2013)	Nursing role/practice of health education	Organizational barriers to H.E.	Training role in health education	Role of knowledge and skills in H.E.
Aldossary et al., (2012)	Nursing role/practice of health promotion	N/A	Role of training in health promotion	Specific practices of health promotion
Koivunen et al. (2011)	Nursing role/practice of health education	N/A	N/A	Role of knowledge and skills in H.E.,
Avsar and Kasikçi (2011)	Nursing role/practice of health education	Some organizational barriers to H.E.	N/A	knowledge, skills & experience
Park 2005	Nursing role/practice of health education	Performance in H.E	Prioritizing health education	Nurse's responsibility for H.E
Fitzpatrick and Hyde (2006)	Nursing role/practice of cultural care	Barriers to H.E.	Learning & educational needs of H.E.	Role of knowledge & experience in H.E.
Sidumo (2007)	Nursing practice of cultural care	Cultural values, norms and beliefs	Learning & educational needs of cultural care	Knowledge of cultural care
Halligan (2006)	Nursing role/practice of cultural care	Cultural values of family and kinship	Religious and cultural influences	Nurse-patient relationship

### **3.4 Section 3. The main themes**

#### ***3.4.1. Health education practice in a cultural context:***

##### *3.4.1.1 Assessment of patient education and cultural needs*

This assessment is the first important step in the health education process. The literature, however, indicates that, currently, nursing assessment is unsystematic and inadequate in terms of providing culturally sensitive patient education. Kelo et al. (2013) claim that current nursing assessment is acceptable. They report that it is based on a holistic needs assessment and multi-method needs judgement. Freda (2004), however, considers that this sort of assessment cannot lead to a successful teaching plan without assessment of the readiness to learn, which not mentioned by Kelo et al. (2013). Another limitation is that there is only a partial needs assessment with insufficient information being gathered. Barber-Paker's (2002) findings are similar, reporting that the assessment of health education is based on nurses' assumptions about clients' learning needs. Similar findings are reported by Avsar and Kasikçi (2011) who clearly indicate the inadequacy of nurses' assessments of patients' educational needs. The findings of both Avsar and Kasikçi (2011) and Barber-Paker (2002) contradict those of Kelo et al. (2013), as they consider that the current nursing assessment of patient education cannot be described as systematic and adequate for what patients need.

There are two sources of this inadequacy in nurses' assessment of patient education. Park (2005) refers to the lack of a clear patient education protocol and a guidance framework for nurses, while Koivunen et al. (2011) claim that the skills required to assess patients' learning needs and variable learning abilities have not been sufficiently taken into consideration sufficiently by patient education curricula.

Making culturally sensitive assessments of health education could be more complex, especially in Saudi Arabia. London (2008) emphasizes that the key to developing education to meet cultural needs starts with nurses understanding their own culture and how this affects their world view and the care they provide. Chang and Kelly (2007) argue that a culturally appropriate assessment of education should includes a broader range of factors, including the patient's beliefs about diseases and treatments, which includes their attitude to health and health beliefs, the expression of pain and the family

social network, plus the patient's background experience of care, language and communication. Saudi papers report that language and communication barriers among the multicultural nursing workforce are the biggest problem (Almutairi and McCarthy, 2012; Halligan, 2006; Rooyen et al., 2010). This presents a challenge to nurses seeking to make an accurate cultural assessment. Change and Kelly (2007) and London (2008) both mentioned that despite stressful working conditions and a lack of time, the nurse is required to know what learning assessment is needed for the patient and how best to achieve this. Aboul-Enein (2002) believes that multicultural nurses who have worked in Saudi Arabia for a long time have been shown to provide optimal nursing care, including culturally congruent care, despite cultural care challenges.

The implication of the previous discussion is that the desired model needs some sort of assessment framework to support the assessment of learning needs. Theoretically, Cutilli (2006) states that the models of Campinha-Bacote (2002); Giger and Davidhizar (2002) and Leininger (2002) are reliable and applicable models and can be used in providing culturally competent patient education. These should provide the nurse with comprehensive guidance for assessing culture and developing their cultural competence. Also, apart from the literature, the model of Howell (1982) and Bennett's developmental model of training for intercultural sensitivity (1986) both consider the assessment of health practitioners' learning needs, and both interrelate and provide useful tools for developing a curriculum to assess the cultural competence of medical students. There is more detailed discussion about the assessment of learning needs in Chapter 4, especially, Mahoney et al. (2006) argue that some of the cultural assessment models are too complicated and their assessment instruments and management tools unreliable and too time-consuming for implementation in routine busy clinical practice.

### ***3.4.1.2 Teaching practice***

Teaching is an essential part of the hospital nurse's practice. The literature indicates that the implementation of culturally sensitive teaching requires improvement in many areas. Friberg et al. (2012) Koivunen et al. (2011) present different types of teaching approaches. Koivunen et al. (2011) mention that nurses' role as teachers includes a determination to construct a conducive learning environment, with good interaction with patients and clear role distinction. The authors claim that teaching is influenced

by patient-centred care that involves shared decision-making, mutual collaboration and active participation with the patient to identify appropriate learning needs.

One aspect of Koivunen's teaching approach, due consideration of patient-centred care, is good, while the other aspect has two main limitations. First, the findings indicate that teaching is influenced by each nurse's decisions based on his/her own justification for what information is to be given to a patient and how a session should progress. Also, the findings do not describe the role of patient assessment in relation to teaching. Those two points suggest therefore that this teaching approach is inadequate. According to Freda (2004), the practice of patient teaching must be based on an assessment of the patient's educational needs, readiness for learning and learning style. Also, in Park's (2005) view, nurses' frequent contact with patients should provide them with opportunities for conducting ongoing assessments of patients' needs and readiness for education, a factor which is omitted by Koivunen et al. (2011). These omitted steps can hinder individualized teaching and may not optimize successful patient education (Change and Kelly, 2007). Conversely, Friberg et al.'s (2012) teaching approach is determined by two main objectives: seeking patient compliance with the medical regimen and encouraging self-care and independence from professional caregivers. Both studies (Koivunen et al., 2011; Friberg et al., 2012), however, indicate that teaching should be conducted as a systematic process.

The important point is identifying an appropriate, culturally sensitive teaching approach that can be used by nurses in Saudi Arabia. Mahoney et al. (2006) suggest that a culturally sensitive teaching approach is appropriate, but this may not be suitable as it was specially designed to teach those with mental health disorders. Freda (2004) suggests that a teaching approach should consist of simplicity and reinforcement. Simplicity means teaching simple concepts and then moving on to more complex ones but retaining simple language. Reinforcement includes repeating key concepts, ensuring the patient's understanding of them and the use of visual teaching aids. Using several senses improves learning progress.

As previously reported, the Saudi literature emphasizes the lack of knowledge about Saudi culture among the multicultural nursing workforce in Saudi Arabia (Almutairi and McCarthy, 2012; Aboul-Enein, 2002; Halligan, 2010; Rooyen et al., 2010;

Sidumo, 2007). In this situation, according to Rooyen et al. (2010), nurses face many challenges, frustrations and feelings of inadequacy when teaching patients with different cultural backgrounds. Sidumo (2007) agrees and believes that education providers' lack of knowledge about a patient's culture may lead to misunderstandings of patients' reactions, behaviours and beliefs in relation to teaching. Hence, they may be mistakenly perceived or considered to be bizarre and uncooperative, or just strange.

Though the literature reflects evidence-based findings for cultural sensitivity practice in health education, it omits theoretical principles of adult learning. Some theoretical literature (Bellamy, 2004; Stewart, 2007; Syx, 2008; Whitehead, 2001a) mentions that nurses must be familiar with a wide range of theories of health education in order to be effective health educators. This includes knowledge of adult-learning theories, learning strategies, teaching approaches and health-education models. Chapter 4 will discuss more theories of adult-learning principles and their implications for this model.

#### ***3.4.1.3 Evaluation***

The literature indicates that evaluation can be a more difficult task if it aims to link to culturally sensitivity patient education. Kelo et al. (2013) show that nurses' evaluation of patient education appears to be done on a traditional way which raises two issues: either educational activities are not evaluated at all or nurses rely on their feelings and/or perceptions to evaluate the effectiveness of the education provided. That is a really good point These findings are supported by Avsar and Kasikçi (2011) and Barber-Parker (2002), while Kelo et al. (2013) show that evaluation is only superficially documented, if at all, and in some cases no verification is done to ensure learning achievement. Similar findings are reported by Avsar and Kasikçi (2011) who show that 65.6 % of nurses do not evaluate the education aids provided. Also, 69.9 % of participants do not monitor changes in behaviour/thoughts after the education process. Both Barber-Parker (2002) and Whitehead et al. (2008) mention working conditions acting as barriers that affect the appropriate evaluation of patient education.

Evaluation of the provision of culturally sensitive patient education does, however, have to consider other issues. First, some foreknowledge and understanding of Saudi culture are required. Mahoney et al. (2006) mention that nurses should evaluate the impact of therapeutic interventions on the patient's cultural, ethnic and spiritual

identity and the impact of practice on care outcomes. Sidumo (2007) sees cultural beliefs as a challenge and considers that health educators, among other healthcare providers, should take on the challenge of teaching and the skill of demonstrating cultural competence. Evaluation should be done based on the patient's cultural frame and address issues of saving face and the need for health literacy (Change and Kelly, 2007). Therefore, foreknowledge and understanding of the patient's culture are a necessity for accurate nursing evaluation of patients in Saudi Arabia.

### **3.4.2 Theme2. Workplace conditions**

#### *3.4.2.1 Hospital environment*

The hospital environment plays a major role in influencing health education and culturally competent practice. Barber-Parker (2002) shows that patient health-education sessions are often interrupted by other staff and duties. Bergh et al. (2012) compare three workplace settings, focusing on the impact of the workplace environment on the health education provided. Their study shows that the most usual setting for primary care nurses to conduct patient education activities is in a private room (78%); municipal care nurses also tend to work a private room (56%) or in the patient's home (43%), while 78 % of hospital nurses uses the patient's room in the presence of other patients. The findings indicate that 75 per cent of hospital nurses and 70 per cent of municipal care nurses can 'never' manage 'occasionally' to teach undisturbed. Moreover, these factors, such as a lack of privacy, negatively impact on facilitating adequate patient-centred education.

A lack of privacy and the hospital environment are not, however, points of concern for hospital nurses in Saudi Arabia; rather, it is the culture of privacy itself, as this is a very sensitive issue, even for a patient in a private room. In some cultures, there is a sensitivity regarding whom to speak to about private issues, and in other cultures there are gender taboos over private issues (Chang and Kelly, 2007). Chang and Kelly consider that cultural differences influence the ways of accepting or rejecting health education. Another problem is that issues such as sexual health are even more sensitive than others (Farahani et al., 2008). Thus, AlShehri (2002) considers that nurses in Saudi Arabia need to understand Saudi culture with its different attitudes, values and beliefs as they relate to their practice. There is, however, the possibility to control an unsettling hospital environment. Kelley and Abraham (2007) show that 63 per cent of

participants see hospital as an appropriate setting for health promotion. And Avsar and Kasikçi (2011) believe that nurses are able to control variables related to work that affect patient education. Avsar and Kasikçi (2011) advise nurses to identify an appropriate educative environment prior to conducting educational activities. This includes locating an appropriate place, setting a time and considering factors such as noise, light, room temperature and other physical conditions, as all these will affect the patient's perceptions of the education provided. Hence, nurses can facilitate the patient's learning process by controlling these variables.

#### ***3.4.2.2 Time constraints***

Time and a lack of it are major influences or barriers to hospital nurses that affect both health education and culturally sensitive practices and are considered to be a common obstacle to carrying out the nursing role of patient educator (Avsar and Kasikçi, 2011; Casey, 2007a; Park, 2005).

There are, however, multiple resources for combating time as a barrier. Barber-Parker (2002) associates lack of time with lack of management support. This support, if present, could create a more positive environment with more time for health education. This opinion concurs with the findings of Bergh et al. (2012) who show that, during a normal working day, primary care nurses report spending significantly more time on patient education than nurses in municipal and hospital care. Park (2005) considers that nurses should learn how to prioritize the care they give in order to allow more time for patient education rather than routine nursing care.

The culture in Saudi Arabia can increase the time pressure on nurses. This refers to the family role in the patient's life. Halligan (2006) describes patient visiting times as very social occasions with in-patients having too many visitors, and relatives, regardless of the patient's clinical status, bring the 'coffee and cake out and put 'carpet' on the floor' with nurses frequently being invited to join in. Also, visitors 'frequently stay for protracted periods beyond visiting time, but neither the patients nor the healthcare workers can dismiss the visitors because it is culturally unacceptable' (Al-Shahri, 2002). Therefore, to deal with this challenge and provide cultural sensitivity in care, Al-Shahri (2002) suggests that health professionals be encouraged to adapt to these norms rather than try to modify them. Hunt (2009) argues that managers need to



examine the impact of particular situations on other patients, despite the cultural norms.

### **3.4.2.3 *Language and communication barrier***

The literature briefly discusses communication practices though it is mainly concerned with communication barriers that may hinder optimizing the practice of culturally competent patient education. Bergh et al. (2012) report that nurses are used to using certain communication strategies to encourage cooperation among nurses and physicians and influence health education. Those strategies include using open-ended questions, asking questions and encouraging patients to repeat or restate their answers, conversing with physicians. Also, using body language to support conversations is important in communities where non-verbal communication is culturally dominant, e.g. Saudi Arabia (Almutairi and McCarthy, 2012).

The challenge of the communication barrier is reported in most of the literature, especially Saudi literature. This is because the majority of the nursing workforce in Saudi Arabia are expatriates, representing around 67.7 % of the total number of nurses (Almutairi and McCarthy, 2012; MoH, 2011a). This multinational workforce comes from more than 40 different countries, including the United Kingdom, Ireland, the USA, India, the Philippines (Aboul-Enein, 2002), Malaysia, Australia, South Africa, Middle Eastern and other countries (Almutairi and McCarthy, 2012). This diversity among the nursing workforce creates, according to Rooyen et al. (2010), a unique working environment with particular experiences and problems.

Part of the challenge is for expatriate nurses to be aware of the style of Saudi communication (Rooyen et al., 2010; Sidumo, 2007). Almutairi and McCarthy (2012) note that, in Saudi Arabia, people use a mixture of verbal and non-verbal communication techniques and often send implicit messages indirectly. This combination of verbal and non-verbal messages should convey the correct meaning that is embedded in the sociocultural context though words alone do not provide a full and accurate meaning.

Another challenge is that the different languages and accents of multicultural nurses can present challenges to nurses who work together and this is perceived as a major challenge to effective nursing care in Saudi Arabia (Aldossary et al., 2012; Almutairi

and McCarthy, 2012; Halligan, 2006; Rooyen et al., 2010) and a barrier to providing cultural competence in nursing care (Chang and Kelly, 2007; Cutilli, 2006; Farahani et al., 2008). Lastly, communication in patient education, which should remain formal and systematic, is made more difficult by the individual's interaction with the communicator (Farahani et al., 2011).

The literature suggests solutions that might help alleviate some of the communication problems. Using interpreters, with certain restrictions, is one suggestion (Almutairi and McCarthy, 2012; Chang and Kelly, 2007; Cutilli, 2006), but Chang and Kelly (2007) consider that nurses should be able to understand cultural norms related to using an interpreter. In some cultures, men have more authority over women and younger colleagues; therefore, it is culturally inappropriate to discuss personal private health-related information, especially gynaecological issues, with someone younger or of the opposite gender. Another point is the Saudi cultural sensitivity problem of caring for the opposite gender as has been reported (Almutairi and McCarthy, 2012; Halligan, 2006; Rooyen et al., 2010). AlShehri (2002) demonstrates that selecting an interpreter of the same gender as the patient results in a more comfortable and efficient interpretation process. Other options are provided by Halligan (2006) who suggests that expatriate nurses be given mandatory training courses in Arabic and information about the local culture. Aboul-Enein (2002) argues that the only way to deal with language and communication problems is "Saudization". This is the replacement of non-Saudi workers by Saudi workers to reduce the dependence on foreign nurses.

#### ***3.4.2.3 Resources***

There is no agreement about the importance and role of resources as factors influencing the cultural sensitivity of health promotion and health education practice. Casey (2007a) reports that 50 % of participant nurses consider that the provision of leaflets is important to help them promote health in nursing practice. Other participants state that more support, in terms of staff and resources such as leaflets, finance, equipment and support from management, would boost their health-promoting role. Other studies (Fitzpatrick and Hyde, 2006; Kelley and Abraham, 2007; Koivunen et al., 2011) agree that the development of patient education needs to consider more resources in terms of space, time and staff.

There are, however, other studies that argued about this importance. Bergh et al. (2012) show that many teaching methods and materials are available to hospital nurses, but not all of them are suitable and effective for use as patient education methods. The study reports that almost 60 % of participants had many teaching materials, but few were used. Similarly, Tes and So (2008) found that about 60 per cent of nurses are satisfied with their own efforts to provide information, despite limited resources and time. Kaariainen and Kynga (2010) agree with Casey (2007a), Fitzpatrick and Hyde (2006) and Koivunen et al. (2011) that effective practice in health promotion/education requires appropriate resources. The authors' claim is based on their study finding that the potential for patient education is very good, even with limited resources, and a lack of time, facilities and equipment. Park (2005) considers that shortages of nursing staff are a long-standing challenge to health education provision.

This argument indicates that the problem is not to do with resources, rather it might be the nurses themselves and the management of their role in patient education. Those studies reporting a lack of resources (Casey, 2007a; Park, 2005) are the same ones that report inadequate management styles for the role of health promotion/education practice; as a result, both studies advise that nurses should change and reprioritize their roles to deliver more effective practice in health promotion/education.

The resources needed to offer cultural sensitivity may not be appropriate for all patients, especially those in Saudi Arabia. Change and Kelly (2007), Cutilli (2006) and Hasnain et al. (2011) advise that a variety of teaching strategies are needed to deal with the cultural diversity of patients. Both Freda (2004) and Mahoney et al. (2006) argue that several of the available resources are not designed to ensure cultural competence because many of those omit the values, beliefs and practices of different cultural groups, as if all patients are a homogeneous group, which is not the case.

In addition, in Saudi Arabia, not all teaching methods and materials can be used. Educational materials with sexual pictures are not culturally acceptable; also, materials with religious content other than Islamic, even in healthcare institutions, are prohibited. Hence some resources or cultural care practices for minorities, immigrants and patients who believe in a religion other than Islam cannot be used. This reflects that there is still some stereotyping that works against minorities in cultural care (Mahoney et al., 2006). Therefore, care must be taken to align teaching materials with Saudi cultural values.

### **Theme 3. 3.4.3 Nurses' learning needs in health education**

#### *3.4.3.1 Current situation of nurse training and education*

Nurses are in need of systematic, integrated training and education if they are to offer effective and culturally sensitive/competent health education. Lack of training is a clear obstacle to nurse's health education role (Avsar and Kasikci, 2011; Jones, 2010). Bergh et al. (2012) demonstrate that some knowledge is absent among one third of the participants in their study. A number of studies have highlighted the importance of training and education as major facilitators for nurses in their role as health promoters (Casey, 2007a; Kelley and Abraham, 2007; Whitehead et al., 2008) and in health education (Barber-Parker, 2002; Fitzpatrick and Hyde, 2006). Fitzpatrick and Hyde (2006) show that the majority of nurses consider their knowledge and experience to be essential factors influencing the standard of education practice. Due to lack of knowledge, nurses may lose confidence, leading to putting less effort into patient education work and ignoring some essential elements of patient information.

The literature presents a variety of reasons for the lack of knowledge and training. Whitehead et al. (2008) refer to the difficulties in instructing nurses in patient education. Whitehead et al. (2008) show that the process of learning about health education from what is taught or demonstrated is difficult, for both teachers and those being taught, as perceived by the participants. Barber-Parker (2002) claim that the lack of continuity in patient care and shortage of time lead to lack of experience for nurses and this plays a major part in the failure to develop their role in patient education sufficiently. Bergh et al. (2012) claim that if managers do not have adequate knowledge or awareness of patients' educational requirements then it will be difficult for them to understand or change the conditions, which could have adverse effects on their staff's knowledge and learning needs. Jones (2010) argues that nurses already acknowledge their role as patient educators. Avsar and Kasikci (2011) and Fitzpatrick and Hyde (2006) agree that it is difficult to determine the adequacy of training programmes as most of the published literature focuses on particular patient education programmes with interventions which may not reflect the nurse training programme itself.

#### *3.4.3.2 Educational demands/learning needs*

The nursing educational demands of health education are various and different. Kaariainen and Kynga (2010) highlight teaching practical techniques and using different pedagogic methods. Tes and So (2008) suggest focusing on organised in-service training that should give nurses experience of the practical side of patient education, such as preoperative preparation, the operating-theatre environment and postoperative care. Fitzpatrick and Hyde (2006) focus on theoretical aspects, such as conceptualizing patient education and designing patient education programmes that can be evaluated in terms of their effectiveness. Barber-Parker (2002) suggests that educational programmes should consider different aspects of health education.

There are other important points to be considered too. The first point of concern is the learning needs for health education based on nurses' own perceptions of their knowledge and ability. Park (2005) considers that nurses have an exaggerated opinion of their own ability. Aldossary et al.'s (2012) study supports this opinion. Participant nurses in Aldossary et al.'s (2012) study perceived themselves as having sufficient knowledge to promote physical activity, quitting smoking and weight control, all of which are areas where the study findings indicate there is a need for improvement in nursing skills through additional training. This does not mean that nurses are lying; rather, there may be a lack of understanding among nurses of the standards of practice for health promotion/education, which coincides with the reports of Fitzpatrick and Hyde (2006) and Casey (2007a).

On the other hand, to design culturally sensitive health education, other challenges and learning needs have to be considered. Cutilli (2006) considers that nurses are expected to be cognizant of the cultural issues of patients for whom they provide care. Such knowledge comprises an understanding of a patient's beliefs and how he/she views the world, in particular health, illness and the dying process. This is important for the healthcare provider when planning culturally congruent care. In addition, in Saudi Arabia, the literatures (Almutairi and McCarthy, 2012; Halligan, 2006; Sidumo, 2007) are concerned about the level of cultural knowledge among the multicultural nursing workforce; (Cutilli 2006; Change and Kelly 2007), it is still necessary to provide the culturally competent practice that is required in health education. Almutairi and

McCarthy (2012) relate this concern to the uniqueness and complexity of Saudi culture itself, rather than questioning nurses' knowledge and ability.

#### *3.4.3.3 Acquiring knowledge for cultural sensitivity in care*

The literature indicates that there are a variety of sources from which to acquire cultural knowledge, and nurses' experiences and direct contact with patients can help. London (2008) suggests that knowledge of cultural competence can be acquired through experience at the bedside during normal care activities and nurses should be able to assess the patient's cultural needs. London's (2008) opinion is supported in Saudi Arabia by two studies (Aboul-Enein, 2002; Sidumo, 2007) which both indicate that nurses may require a mixture of knowledge and experience to develop their cultural competence, which is comparable to the development of their health education practice as reported in Jones (2010) and Fitzpatrick and Hyde (2006). Another source of knowledge is associated with management personnel. Halligan (2006) claims that managers make regular assessments of staff's cultural knowledge and skills to ensure that they are able to deliver appropriate culturally based care.

The presence of cultural knowledge alone does not necessarily lead to appropriate practices, even when nurses are culturally aware. It is difficult to apply health education if there is a major obstacle to cultural values. Farahani et al. (2008) give an example; Islamic belief instructs Muslims to use water after every visit to the toilet. Despite that, however, there are exceptions for people and patients who cannot use water owing to their condition, but patients refuse to learn about this cultural belief as it contradicts the habits of everyday Muslim life. This finding is reported by London, (2008) who advocates including knowledge about and skills in providing culturally competent health education. As the desired model is an educational one, it is then important to explore theoretical models of health education and their suitability for use as guidance to educate nurses about health education. Especially the definition of practice-based health education model of this study consider that theoretical knowledge of health education is an important element for this model. The next chapter therefore will explored this issue in detail.

### **3.4.3 The contribution of the literature**

Though the literature has a variety of findings and conclusions, there are four main findings and three main conclusions. First findings, the literature illuminates many challenges related to nurse education and nurses' preparation for cultural sensitive health education. These include: lack of training and educational opportunities, and inadequacy of the education or training provided. In addition, the same problems related to nurse education and preparation for health education are also present for nursing education about cultural sensitivity/competency. Given that those problems are reported in the majority of the literature, suggesting that the educational related challenges of cultural sensitive health education are enduring, it would appear that solutions have not been seriously considered: they are evidenced in older and new studies such as Furber (2000) and Bergh et al. (2012).

The second important findings mentioned by the literature relate to hospital working conditions. The literature provides a wide range of factors that are reflected as barriers for the nursing practice of health education and cultural sensitivity of care. The third noticeable point is nursing competency and confidence in both the practice of health education, and practice of cultural sensitivity in nursing care. The literature mentioned inadequacy, limitations, unsystematic and disarranged practice of cultural sensitivity and health education. These issues were also linked to the amount of knowledge, skills, and training for health education, and the hindrance of the working conditions. The fourth main finding is that culturally sensitive health education requires a wide range of motivational interventions, as there is are not enough motivating factors to encourage nurses to engage in positive practice for culturally sensitive health education. What is missing from the literature and can be a contribution of the intended research, are four main contributions and conclusions.

First, the literature omits and requires a clear structural framework focusing on practice-based cultural competence/sensitive health education for hospital nurses. This study can bridge this gap via the development of a new conceptual framework of practice-based, culturally sensitivity health education for hospital nurses as one concept, in one study, to create a new specialized model. This means the framework has to be fully integrated into health education, inclusive and aligned with cultural

needs, and taking account of the practice variables in the literature. Despite the goal to develop a new model, the new framework itself is a new theoretical contribution and offers practical guidance for practice-based cultural sensitivity in health education for hospital nurses, which is something missing from the nursing literature, as will be explained in detail in the model design chapter.

The second contribution concerns the shape and structure of a curriculum for culturally sensitive health education. The literature provides information about the goals, objectives, assessment of learning needs, content of learning, teaching strategies and materials and resources required for nurses' education in culturally sensitive health education. These elements are essential for educational curriculum planning (Schloss & Cragg, 2013), and for doing an educational research project (McKenney & Reeves, 2012), meaning the study has the elements needed for educational research and to create an educational curriculum for practice-based culturally sensitive health education for hospital nurses, which is omitted from the nursing research and nursing literature; and hence, the study can fill this gap. This will also be covered in detail in the discussion and model design chapters.

The third contribution for this study is the combination of the four main conclusions of the literature to ensure that nurses are "competent" in cultural sensitive health education. The four main conclusions can be summarised as the presence of work conditions that affect delivery of cultural sensitive health education, nursing education preparation for health education, lack of competent practice of cultural sensitive health education, and the need for motivation. The education, as represented by a lack of knowledge, skills, and the hindrance of the working conditions has similar weight as factors influencing nursing cultural sensitive practice of health education, and both have equal discussion within the literature, meaning both must be considered to reflect the practice-base cultural sensitive health education. In one sentence, nurses have to learn about working conditions and how to deal with them as much as they have to learn the knowledge and skills of health education. This combination between education and working conditions education is a new idea, and this must be the third contribution of this study. Especially, this researcher never found this idea in any of the nursing planning programmes for health education or planning programmes for



cultural competency. This will be covered in detail in the discussion and model design chapters.

The fourth main contribution is the model itself. The previous three main contributions indicate that what nurses really require is a model, not just an educational curriculum, because educational intervention is just one part of the elements need to create competent nurses. In addition, some of the motivational interventions mentioned in the literature are beyond the scope of educational intervention, which is the aim of this study, such as managerial support. Despite that, the shape and structure of the model, creating a practice-based culturally sensitive health education model for hospital nurses is a new and unique idea in the nursing literature and will help to develop nursing care practice; the next chapter will discuss some of these possible contributions.

#### **3.4.4 Conclusion**

The development of a culturally sensitive practice-based health education model for hospital nurses has been the focus of the literature review presented in this chapter. Emergent implications include knowledge and understanding Saudi cultural values, especially religious beliefs. The literature exposes the need for nurses to have sufficient education to be able to practise culturally sensitive health education. This requires a combination of theoretical knowledge and training in the practice of health education, the work conditions and environment have to be considered as these can raise barriers, but good conditions will encourage and facilitate the provision of health education, which in turn will increase the standards of practical nursing care. The emergent themes and discussion generated by this literature review provide many essential points for the planning of culturally sensitive health education, which is the main aim of this study.

## **Chapter 4. Theoretical and conceptual frameworks**

### **4.1 Introduction**

A conceptual framework is defined as "a model or the formal way of thinking about the process/system under study" (Bernard & Tichkiewitch, 2008, p. 352). "It is a result of the theoretical framework and bringing together a number of related concepts to explain or predict a research problem" (Imenda, 2014 P. 189). Its importance to research projects is that it helps in identifying research variables, the relation between variables in a logical fashion, and in consideration of a literature review it provides a solid basis for the research project and its design (Anderson, 1990).

Therefore, the aim of this chapter is to discuss critically the theoretical and conceptual frameworks that underpin this study. This includes, first, a discussion of the current health education and promotion models, their implications and the possibility of using these models for nurses' education in health education, and a brief summary of their theoretical assumptions. These are important for developing a conceptual framework for the study that is aligned to the key findings from the literature review in the previous chapter and for the intention to design a practice-based, culturally-sensitive education model, the research focus of this study. Secondly, there is a detailed discussion of the design of the conceptual framework, including selected theoretical models, to guide the development of a model for health education, along with conceptual frameworks, and their advantages and limitations. Those two targets are important to inform the shape of the study design, the objectives and the methodology chapter.

### **4.2 Models of health education**

This intention is targeted in order to create an education model/curriculum that can be adopted and used to prepare hospital staff in Saudi Arabia to provide health education. There are, however, challenges when considering and choosing the ideal theoretical framework for this study. This is because the available models currently utilised for health promotion and education practice are specially designed for health promotion and education practice, such as Pender's (1996), Therapeutic Patient Education (TPE) model (WHO, 1998) and that of Tannahill (1984). Likewise there are particular models for cultural competency (Campinha-Bacote, 2002; Jeffreys, 2006; Purnell, 2005; Purnell and Paulanka, 1998). None exist that satisfy the exact requirements of a model

for this study. The existing models are not specially designed for hospital-based nursing health education practices that are culturally sensitive, such as what this study planning to design.

Pérez and Luquis (2008) suggest that there a limited number of models that consider the impact of culture in health promotion, and those provide some help for planning promotional programmes for multicultural groups, such as Airhihenbuwa (1995) and Huff and Kline (1999). In addition, there are models which are validated and often used as operational health education planning and intervention mapping model such as PRECEDE-PROCEED (Green, 2005 as cited in Cohen, et al., 2010), MATCH (Simons-Morton et al., 2012), and CDC Cynergy and SMART models (Cottrell & McKenzie, 2011). The implementation of these models in America were evidently proven to be effective health promotion models (Pérez and Luquis, 2008), but America is not Saudi Arabia, and so the transferability of these models to the context of Saudi Arabia is potentially challenging. Cambon et al. (2012) believe that the transferability of health education interventions or models is a very complex issue. This is because it is necessary to consider population type, available resources, professional types, environmental factors and programme or intervention outcomes, and these factors may differ from one country to another. Also, Pérez and Luquis (2008) mention that it is perceived by healthcare professionals, such as nurses and physicians, that those earlier "practice-based" models are difficult to use with a culturally diverse population due to the differences in subgroups, educational levels, health beliefs, value systems and socioeconomic conditions.

In addition, reading through those models indicates to the researcher that each one has its own challenges in terms of being implemented for hospital nurses and they need to be assessed carefully before being considered as a framework model to guide the preparation of hospital nurse health education. Tannahill (1985) presents a model consisting of three dimensions, prevention, health protection and health education, and there is an explicit examination of the important interactions between areas of overlap of the three components. This model believes that health education is a communicative process that enhances health and well-being and prevents ill-health by influencing health beliefs, knowledge and attitudes. Consequently, the model can improve an individual's health by making efforts to improve health and prevent ill health through a

multiple formula of health education, prevention and health promotion (Tannahill, 1985). This neatly places health promotion within the framework of the broad range of traditional public health domains which are united by principles of health promotion, the nature of which is eclectic and multidisciplinary (Davies and Macdowall, 2006). According to Oakley (2008), it is a model widely accepted by healthcare workers as it is primarily a description of what goes on in practice, which gives it credibility as an evidence base. It offers a model for defining and planning and explains what is most important about providing health promotion (Tannahill, 2009).

As an educational model, it has features that might be useful in a nursing education curriculum model (Koutoukidis, 2013); Tannahill, (2009) mentions that it can be used in undergraduate and postgraduate teaching as it focuses on modern-day public health policies which hinge on reducing health inequalities and improving life circumstances, which is consistent with health protection. Evans et al. (2011) dispute this and mention that although Tannahill's model does help in providing an understanding of the intentions of health promotion practice, this model does not give clear directions or "know-how" about how to construct and manage the nursing practice of health promotion and health education, especially in hospital settings. Also, Raingruber (2014, pp. 62-63) criticizes Tannahill's model for being "a reductionist medical model that pays insufficient attention to community-based factors which should be considered in all health promotion practice".

Nola Pender's health promotion model (HPM) was proposed in 1982 but revised in 1996 and is designed to be a complementary counterpart to models of health protection. This model has three major categories: individual characteristics and experiences; behaviour-specific cognition; effects and behavioural outcomes. It can be described as a theory that combines a number of constructs from Bandura's (1986) social learning theory that focuses on self-efficacy and expectancy-value theory, suggesting that the course of action chosen will probably lead to the desired outcome, and that this outcome will be of positive personal value (Pender et al., 2006). The belief of this model is that the perceived benefits of actions, barriers to actions, competency and self-efficacy all interact with each other and affect the response to behaviours; and when a behaviour is associated with a positive effect, the commitment to action increases. Meanwhile, according to Kearney-Nunnery (2012, p, 2002), "it

seems to take an advanced step over [the] Health Belief Model as it [is] more grounded [in] individual, unique, personal history and pattern[s] of life".

Peterson and Bredow (2009) however mentioned that it requires more work to investigate how this model works in various cultures, with different behaviours, development and a gender-based population. These factors are very important as the literature validates the complexities of Saudi culture and the presence of sensitive cultural issues that affect females more than males. Also, the model focuses on the individual rather than focusing on larger groups, such as family, community and society. Hence, this model may not work appropriately in Saudi Arabia as family and community are a central part of Saudi life (Halligan, 2006). In addition, the model is about understanding the dimensions of health promotion interventions rather than providing nurses with guidelines for using the framework. Peterson and Bredow (2009), as previously reported in the literature review, note the importance of developing interventions which are necessary for training nurses in health education (Casey, 2007a; Falvo, 2010; Kaariainen and Kynga, 2010). Therefore, the models of both Pender and Tannahill are not aligned to this research project.

There only two models whose design offers educational guidance, the Therapeutic Patient Education (TPE) model (WHO, 1998), and Jefferys' (2006) model of cultural competency and confidence (CCC). The philosophy of TPE model concerns healthcare professionals' preparations. It believes that introducing changes to unprepared institutions would simply fail if their staff were not offered clear guidance and assistance with health education. Therefore, one of the strengths of TPE is its emphasis on a clear educational framework to provide healthcare professionals with basic knowledge, principles and guidelines for patient education, and its structure is based on a learner-centred approach and the patient-education process.

Stewart (2003) views TPE as an integrated educational process that allows practitioners to understand, consider and deal with patient diseases and barriers that affect education though encouraging, collaboration and sharing decisions. The ideas in TPE are relevant for this research as this author expects that the results of this study will lead to a better educational curriculum for nurses and improved health education for the multicultural population in Saudi Arabia.

The problem is that there are some limitations when working with the TPE. These include the requirement for teamwork, a supportive work environment with human and financial resources, and consideration of the educator's training needs and work barriers; and overall it is time-consuming (WHO, 1998). These limitations are the same as the main barriers to effective health education which affect hospital nurses, as previously reported in the literature review, and the important motivation factors discussed below. Therefore, practically, TPE may be a challenging model for hospital nurses, given that no studies have investigated the impact of TPE on educational guidance for hospital nurses. The second educational model is Jeffrey's (2006) Cultural Competency and Confidence (CCC) model.

### **4.3 The selected models for the conceptual framework**

It can be seen that the existing models, and the examples identified above (Pender, 1982; Tannahill, 2009; TPE 1998) were not created for specific use within practice-based health education, driven by the need for cultural sensitivity for hospital nurses. Therefore, this researcher decided to create a new conceptual framework based on a combination of the best available options for models and guidance related to both cultural sensitivity and practice-based health education in order to benefit from their components. The models or guidance that are selected must match the findings of the literature review to ensure that they are as suitable for this study as possible. Therefore, two models were selected; Jeffrey's (2006) CCC model is the primary selected model, to cover not only the cultural sensitivity part, but also most of the points mentioned in the literature, as will be seen in the following discussion. With Jeffrey's model being a special model designed for cultural competency, it has a key limitation in that it omits some elements of health education such as health/patient education process. Therefore, Pérez and Luquis' (2008) Cultural Competence of Health Education is selected as a secondary source to cover practice-based health education.

Jeffrey's (2006) model was selected for several reasons. First, Jeffrey's model shares the similar aim as this research project, to prepare nurses educationally for culturally competent practice which is the target outcome of this study. Jeffrey (2010) states that the purpose of the CCC model is to provide a systematic organized educational framework for examining multicultural factors that affect the learning process of

cultural competency, build a perspective of diagnostic learning strategies, and guide the theoretical development of a modern teaching. The model is a multidimensional learning process that consists of integrated transcultural skills in three dimensions, practice, cognitive and efficacious, all of which should be measured and identified. Both Dreachslin et al. (2013) and Oermann and Heinrich (2007) describe CCC as a comprehensive teaching and learning model about culture competency in nursing and healthcare.

The theory of self-efficacy (Bandura, 1986) is the kernel of the CCC model. Balcazar (2010) states that the core of the CCC model is its emphasis on the development of self-efficacy in health professionals. Self-efficacy is the belief that one can achieve competency in a practice area; as a result, it motivates individuals to overcome obstacles and embrace learning experiences. Hoeman (2008) mentions that the theory of self-efficacy suggests that individual confidence or self-efficacy influences people's actions, which means that people with low self-efficacy are expected to show more changes in behaviour than a person with high self-efficacy. This is similar to the theory of the health belief model mentioned by Polit and Beck (2008) who explain that this model proposes that perceived self-efficacy related to a given behaviour or task will increase the likelihood of a commitment to action and actual behaviour.

On the other hand, what Pérez and Luquis (2008) offer is more guidance than a model. This was selected as it reinforces a number of the guidelines and principles for the planning of cultural competency in health education. According to Pérez and Luquis, (2008) it is built based upon a combination of five health-education planning models (PRECEDE-PROCEED, MATCH, CDC, Cynergy and SMART) used together to frame culturally appropriate health education and promotion programmes, and considering health-education principles and demands, including health education processes, such as assessment, planning, implementation and the evaluation of cultural competency (Pérez and Luquis, 2008). In addition, it provides guidance in how to develop a strong curriculum for health-education preparation programmes.

Apposing to Jeffery's model, Pérez and Luquis (2008) works well as guidance in planning health education programmes, but its main limitation is that, culturally, it is built based on American ethnic and cultural groups. Thus in terms of culturally-

sensitive guidance for other cultural groups, such as in Saudi Arabia, it may be a challenging. Therefore, both models have their strengths and limitations, and many similarities, meaning that each model on its own is not ideal for this study as this involves a new unique project. It is believed that combining the models could deal with each one's limitations and help create a formula that should be suitable for use as a conceptual framework for this study.

#### **4.4 The conceptual framework design**

An important emergent point from the literature is that education and training alone are not sufficient to provide practice-based cultural sensitivity in health education. It must be accompanied by practice-base-related development interventions to ensure that nurses are able to provide appropriate health education. Only through education can nurses become competent, but often they still cannot practise health education due to the strong impact of workplace-related barriers and conditions. Therefore, this conceptual framework was designed based on themes shared between Jeffery (2006) and Pérez and Luquis (2008) on one side, and literature review findings on the other, to ensure that nurses can be competent and able to practise health education. Consequently, this new conceptual framework consists of two main parts include education and practice related intervention.

##### **4.4.1 Education-related interventions**

Starting with education-related interventions, the first important point in Jefferys (2006) and Pérez and Luquis (2008) and the literature review is that assessment and identifying learning needs to be based on a systematic learning-needs assessment. Identifying relative subjects of knowledge is the first important part of learning needs, as the link between the definition of the practice base, the literature-review findings and the basic elements and domains of both sources (Jefferys, 2006; Pérez and Luquis, 2008) is that they all start with the cognitive knowledge domain.

For cultural competency, knowledge is the basic domain of cultural-competency models (Campinha-Bacote, 2002, 2007; Jefferys, 2006; Kim-Godwin et al., 2001). The CCC model takes a broader view as it sees knowledge as part its cognitive dimension and includes knowledge and ways of understanding which are cultural factors that



influence nursing practice (Jefferys, 2006), though this is not very evident in the rest of the literature. Cultural awareness also needs to acknowledge the need for cultural competency; throughout the literature this theme is constant, while cultural knowledge represents the faculty for learning about various cultural issues (Jefferys, 2006).

For the practice of health education, Pérez and Luquis (2008) also believe that competence in health education must include a broad knowledge base of health education and culturally related subjects of knowledge. Many authors (Furlong and Oancea, 2008; Higgs and Titchen, 2008; Petr, 2009) classify knowledge and cognitive demands as a very important part of "practice-based" health education. It is also a basic domain of health promotion practice (McQueen, 2013). The literature, on the other hand, mentions the lack of knowledge of health education among nurses (e.g. Avsar and Kasikci, 2011; Bergh et al., 2012; Jones, 2010) and suggests there is a need for a range of subject knowledge in health education (e.g. Fitzpatrick and Hyde, 2006; Park, 2005). Hence, identifying related areas of knowledge is necessary for cultural competence in health education (McQueen, 2013). Therefore, one objective set is to identify which aspects of health-education knowledge are most valued by hospital nurses.

The second part of assessing learning needs is identifying required skills. Amongst cultural-competency models, Jefferys (2006) and Purnell (2005) believe in the importance of practice and skills in cultural competency. The role of cultural skills is to encompass the ability to conduct cultural assessment and intercultural communication, and together these issues lead to cultural competency (Jefferys, 2006). For models of cultural competency of health education, the importance of skills is not about the skills themselves as knowledge alone is not sufficient to design and plan cultural competency in health education; it must be accompanied by a wide set of practical-based skills and abilities (Pérez and Luquis, 2008). On the other hand, the literature discusses the nature of health education skills required and makes suggestions, such as in Barber-Parker (2002) and Furber (2000). In previous sources, Jefferys (2006) Pérez and Luquis (2008) and the literature review), there are many different theories and evidence-based findings about health-education skills in general practice, but all strongly recommend using many types of communication skills. Therefore, identifying

the skills required for cultural competency in health education should be set as an objective.

The third important point relates to education interventions and links both models (Jefferys, 2006; Pérez and Luquis, 2008) with the findings from the literature review; the literature reports problems relating to how self-efficacy and confidence affect nurses' performance in health/patient education. The literature indicates a lack of confidence and feelings of incompetence among nurses regarding their skills in health education (Aldossary et al., 2012; Fitzpatrick and Hyde, 2006; Park, 2005) and insufficient specific health education skills in such areas as assessment (Avsar and Kasikçi, 2011; Barber-Paker 2002) and teaching (Friberg et al. 2012; Koivunen et al. 2011).

Also, Fitzpatrick and Hyde's (2006) study demonstrates a lack of confidence due to a lack of knowledge. Such nurses, according to Jefferys (2006), are at risk of decreased motivation and lack of commitment, leading to the omission of cultural considerations when planning the implantation of nursing care. Hoeman (2008) suggests that those nurses requiring a learning strategy will have their self-efficiency levels augmented, which would accomplish the desired outcome of effective health-education practice. Opposing that, Park (2005) shows some overconfidence among nurses. The CCC model sees those nurses as being at risk of insufficient and inadequate preparation when educating them about the cross-cultural nursing skills that are required to achieve cultural competency. Apart from what is in the literature, nurses' personal problems, such as obesity and body size, are proven to affect their performance when presenting health education material and their interactions with patients as appropriate weight inspires more confidence in their teaching (Hicks et al., 2008), and this then affects the performance of other nurses and their ability to care for very diverse patients (Bernal and Forman, 1993, as cited in Starr, 2009). The CCC model (Jefferys, 2006) indicates that, first, there is a need to know nurses' confidence level, because regardless of the important role played by cognitive knowledge and psychomotor skills in solving low and overconfidence, identifying confidence level is important as this affect nurses' motivation, persistence and commitment to achieving cultural competency. Therefore, another objective was set to explore nurses' self-perceived competence levels in health-education skills when delivering health education.

#### 4.4.2 Practice related interventions

The second part of the conceptual framework is about practice-based, related intervention which has two major points. First it is important to identify workplace-related conditions and barriers. Theoretically, Pérez and Luquis, (2008) concluded that cultural competency in health education requires identifying three types of factors, including: predisposing factors which provide motivation and a rationale; reinforcing factors which offer rewards and incentives; and enabling factors which facilitate performance. Also, the models of Betancourt et al. (2003) and Sue (2001) consistently advocate the need to consider a more supportive workplace environment when planning cultural-competency training programmes.

The review, as demonstrated by Jeffery (2006), sees working on these factors more as motivational interventions than managing interventions, such as a literature review. This may be because it builds theoretically on the demands of cultural competency, not cultural competency in health education. Jeffery's model claims that cultural competency is not achievable unless individuals are intrinsically motivated. Transcultural self-efficacy should be a positive influence on intrinsic motivation and persistence and should result in cultural competency of the self and others. This motivation should be reflected in in-service development and continuous education and knowledge about dealing with other work-related problems, such as shortages of nurses and lack of time, in order to motivate the understanding of different cultures and achieve culture competency in practice.

Despite the wide range of motivational interventions, what is important for this study and matches the literature review regarding the practice base of health education basically concerns workplace-related barriers and working conditions. The literature, presents multiple factors related to the hospital environment (e.g. Barber-Parker 2002; Bergh et al., 2012), or nurses' work (e.g. Park, 2005; Casey, 2007a; Avsar and Kasikçi, 2006) that may constitute a hindrance to patient-education delivery. By identifying these factors, Pérez and Luquis (2008) believe that models and programme-makers can have a better clearer idea of what the focus of their project should be. Therefore, the fourth objective is to identify any organisational barriers that might impact on the delivery of health education in hospitals. Hence, the conclusion at this point of

discussion vis-à-vis a conceptual framework is that there is a need to identify these barriers as a first priority in order to manage supportive motivational interventions

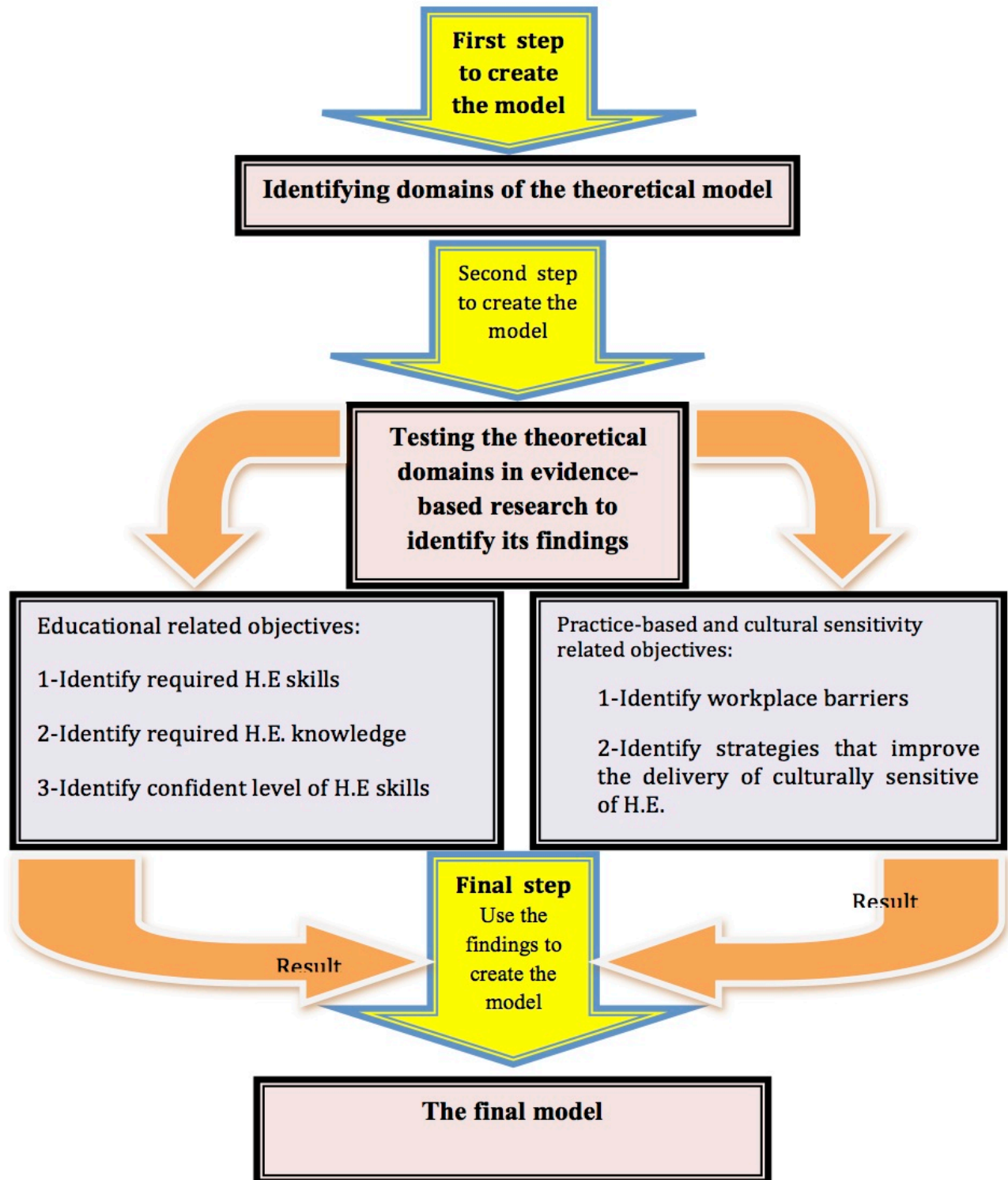
A second point related to the practice base is the practice of health education in a multicultural context. The literature mentions challenges and possible solutions and strategies related to the delivery of cultural sensitivity in health education. Also, Jeffery (2006) and Rooyen et al. (2010) make recommendations to develop and decrease challenges to the provision of cultural competency in a multicultural context such as that in Saudi Arabia. Those strategies include recruiting expatriates and resultant language barriers, which represent major challenges affecting cultural competency. More mixing of nurses who work together, such as Saudi and expatriate nurses, could help to address some of those challenges. Amongst these are suggestions to help provide effective teaching, which is actively required to engage nurses in the process of cultural competency and identify their learning needs via an assessment. Therefore, the fifth objective is to identify any strategies that might impact on improving the delivery of culturally-sensitive health education.

Therefore, this conceptual framework is a new one as it has three new and unique ideas. First, this conceptual framework consist of two main parts, education- and practice-base-related objectives. Identifying the three education-related objectives is not a new idea as these are presented as the three basic domains of Jeffery's model for achieving cultural competency. The new issue in this conceptual framework is that the three main domains of Jeffery's model represent only the educational part of a practice-based health-education model. This model and its framework see cultural competency in health education as unachievable by education alone, it must be accompanied by practice-based demands.

The second new idea in this framework is that this may be the first cultural sensitive educational project of health/patient education for hospital nurses as no publications were found that cover such a project. The previously identified objectives can now inform the methodological design in order to test the theoretical domains in evidence-based research and identify its findings, which is the second of three steps to create the model. In all the models, the literature review emphasizes the need for nurses to be trained and given enough knowledge to be able to practise health education. The results of this study are expected to fill that knowledge gap by demonstrating how to

plan and deliver a cultural-competence model of health education that can be used by well-trained nurses so that they can increase their knowledge of well-being and general health in Saudi Arabia. Figure 4 summarises the process needed to create the model.

**Figure 4 summarises the process needed to create the model.**



## **4.5 Conclusion**

This chapter has discussed health-education models and their components, and critiqued them vis-à-vis the research focus, developing from them a new model or framework to underpin the study. The researcher has discussed the health education model and how the literature was inked with them regarding a culturally sensitive of health education. The study objectives have been set from discussion of the relation between the theoretical models of health education and the literature review findings. The new conceptual framework is now able to fill a gap in knowledge and practice via the results of this study, as it comprises two parts which include education- and practice-related interventions.

## Chapter 5 Methodology

### 5.1 Introduction

This chapter is going to discuss the methodology planning and implementation phases for the research study. The planning phase focuses upon the two main paradigms related to research philosophies. Initially research paradigms pertinent to the study's intention and research design will be explored, then positivism, post-positivism and interpretivism. The discussion will include their history, philosophy and advantages, and justification within this research design; it will consider their implications for the mixed method strategies to be employed within this research study. This will be followed by a detailed description of each research methods, sampling, the ethical considerations will then be explored. The implementation focuses upon data collection period and analysis procedures.

### 5.2 Methods Planning Phase

#### 5.2.1 *The two main paradigms of research and its philosophy*

The paradigms have an influence on research. Kuhn (1970) views the paradigm as a set of linked assumptions about the world which are shared by the professional community investigating it. Kuhn included a paradigm in a new vision, in which it provides a source of revolution, and transformation, and it transfers or shifts the world view from one way of thinking to another. A paradigm is defined as "the basic beliefs, systems, or the world view that guide the investigation, not only in choice of methods, but in ontologically and epistemologically fundamental ways" (Denzin and Lincoln, 1994, p. 105). Guba and Lincoln (1994) have similar views of a paradigm being a set of beliefs. These beliefs are basic, in the sense that they must be accepted simply through faith. The connection point between previous publications (Denzin and Lincoln, 1994; Guba and Lincoln, 1994; Kuhn, 1962) is the role of paradigms in research, and the two main paradigms. Denzin and Lincoln (1994), for example, consider that new or modern research has emerged within the positivist area, while Guba and Lincoln (1994) seem to consider Kuhn's views about the positivist paradigm. This provides an introduction to the two main paradigms and their relation to research.

There are two major research philosophical paradigms that might be selected as methods for this study, they are: positivism/ post-positivism and interpretivism.

Understanding both paradigms should help to understand why both quantitative and qualitative approaches are needed for this research, and what they can bring to this study. The first paradigm is positivism, which was developed during the Enlightenment period when researchers started using reasoning, leads and justification to replace religion and faith to explain phenomena, and it is largely associated with quantitative research (McConville & Chui, 2007, p.49). This paradigm believes that there is only one truth, just one objective external reality, and that reality exists apart from the researcher (Belk, 2006). This reality, according to Petty et al. (2012), can however be divided into multiple parts, and knowledge is gained by looking at those parts. The paradigm here is that the stable reality of human experiences can be measured, observed in a precise and systematic way to develop objective knowledge or facts. Hence, observation of this reality can lead to knowledge (Belk, 2006). In this paradigm, ontology believes in a single objective reality; therefore social reality, for example, is as a result of natural and causal relations between events (Iosifides, 2011), meaning that the positivist research approach simplifies a problem, setting or situation under investigation, then examines the relationship between two or three factors or variables at a time that are related to that problem or situation, and considering the rest of the environment statistically or experimentally.

Both positivist and post-positivist approaches have things in common, e.g. logic is deductive in both paradigms and the goal is explanation, and both reflect a foundation and stand as an anchor for quantitative research (Santos, 2009, p.4). Leavy (2014) mentions that the only difference between positivism and post-positivism is that positivists believe that the goal of research is to reveal reality, which is the truth, while post-positivists believe that all observation is fallible and prone to error, all theory is revisable and the goal of research is to hold steady to the goal of getting it right about reality, even though the researcher can never achieve that goal.

The second main paradigm is interpretivism, which is associated with qualitative research. This paradigm is characterized by a strong sense of connection and relation between researcher and research subject in order to build an understanding between them (McNabb, 2002, p. 100). Thus this approach according to Lincoln and Guba (1985) seeks truth and reality through research, and so people seek an understanding of the world in which they live and develop subjective meanings of their experiences.



Lincoln and Guba believes that these multiple meanings are very difficult to understand or to interpret as they depend on other systems for meanings.

There are differences between positivism/post-positivism and this paradigm. The first difference is that, according to Petty et al. (2012), interpretivism believes that the social world cannot be researched in the same way as the natural world. It about reasoning and following leads in data collection and analysis to understand the reality of particular situations. Meaning can be gathered through interaction with others and within particular cultures, and this broad view is often explored. Then, knowledge will be gathered through co-construction, from the researcher's understanding of the data and the participant's own words on the issue under investigation (Petty et al. (2012). In other words, there are multiple realities or multiple truths based on one's construction of reality, and each reality is subjective and exists only in reference to the researcher as part of the research process. Also, interpretivists believe that reality is holistic and cannot be divided in parts, as in positivism, and the researcher has to examine the whole process and believe in that reality (Lincoln and Guba, 1985).

This researcher believes that there is a need to look differently at the role of the two main paradigms in research. Guba and Lincoln (1988) believe that the two paradigms may not compatible as it is not feasible to mix the very different ontological and epistemological stances of their traditions. This means it may not be possible to mix both paradigms in a single research project or in mixed methods. Other researchers, however believe that competition between paradigms is not helpful in developing research and that the debate must focus on rivalries that may be usefully combined (Giddings, 2006; Johnson and Onwuegbuzie, 2004; Sale et al., 2002; Stevenson, 2005). Johnson and Onwuegbuzie's (2004) view is that discussion of the two paradigms should move beyond quantitative versus qualitative arguments and consider the field of mixed methods, especially if mixed methods is considered a third research type. Giddings (2006) agrees and mentions that the traditional approach forces researchers to select whether they are quantitative positivists or qualitative interpretativists, and so it might be better to look at the advantages that the two paradigms together can bring to research projects, which might endow mixed methods with the best of both world views. Hence, there is a need to understand mixed methods and thus the advantages that the two main paradigms might bring to mixed methods.

## **5.2.2 Mixed methods:**

### *5.2.2.1 Overview, history and origins*

The history and origin of mixed methods began over three decades ago. It started with significant developments in the methods and terminologies used in the intervening years (Andrew and Halcomb, 2009). It started with multiple operationalism which is described by Webb et al. (1966), as cited in Kennedy and Bush (1985), as multiple measures to validate a result. This is used to ensure and explain that variance is as a result of the underlying phenomenon or trait and not the method. Then began the terminology of nomenclature for multiple operationalism (Campbell and Fiske, 1959) to triangulation (Jick, 1979) which is often used to indicate that two or more methods are used in a study to verify the results. Then there is between-methods triangulation (Denzin, 1989) which tests the degree of external validity while multi-methods research (Brewer and Hunter, 1989) offers an explanation of how a planned synthesis of various research techniques, such as fieldwork, surveys, experiments and non-reactive studies, can be purposely used to improve social science knowledge. Then the term mixed methods emerged.

This raises the use of mixed methods because, and according to, Tashakkori (2003), some research is complex and multi-dimensional,, which means that using a qualitative or quantitative research method alone in research would be restricted and controlled by that method's role and capability. Hence, one method answers the research question in one dimension but may have limitations in dealing with other dimensions. In addition, Buchanan and Bryman (2009) mention that some research studies are ambiguous and unclear, and it is not obvious what the results denote, which increases the demand for a new approach to research. Creswell and Clark (2011) and Johnson et al. (2007) agree and they mention that, in the late 1980s, some publications started reporting limitations and challenges when using a single method, whether quantitative or qualitative, and the need to link and combine two or more methods into one; and as a result, the concept of mixed methods began by combining qualitative and quantitative methods within a single research project (Buchanan and Bryman, 2009; Tashakkori, 2003).

Therefore, mixed methods research can be considered a third major research method, in addition to quantitative and qualitative methodologies (Andrew and Halcomb, 2009). It combines different types of research, and make use of qualitative and

quantitative designs and other methods to gather data. This approach is defined by Tashakkori and Creswell (2007, p. 7) as "research in which the investigator collects data and integrates the findings and draws inferences using both qualitative and quantitative approaches or methods in a single study or program of inquiry".

#### ***5.2.2.2 The philosophy of mixed methods.***

There are different philosophies for mixed methods; they can be classified based on their tendencies into three types include: philosophies related to role of the two main paradigms in mixed methods, philosophies focus on other paradigms' frameworks that are used to explore mixed method practice, and philosophies about belief in mixed methods is a belief in their "complementary" nature.

As mixed methods reflect both qualitative and quantitative approaches, it means that they reflect both a qualitative interpretive approach and a quantitative positivist approach. Hence theoretically, research can be influenced by the advantages of both paradigms. There are several advantages in considering the two main paradigms for this study, and what they bring to this study varies. The advantages of doing research from a positivist research approach include: the use of a survey studies approach has the ability to produce great amounts of numeric data that can be arranged and presented to help answer the research question (Ingleby, 2013). This arrangement is very important for arranging and prioritizing multiple themes for this study, including learning needs, and this can help to create a successful educational project (Bastable, 2006).

In addition, another advantage of using a positivist approach is the emphasis on objective and scientific research and the definite nature of findings (Ingleby, 2013, p.154). This can help to increase the generalizability and possible publication of the study findings. Positivist research has more chances of creating knowledge that is more generalisable across different populations (Belk , 2007, p.216), as the processes, principles and basics of health education and practice are almost the same. Moreover, the positivist approach provides the researcher with predictive capacities for identifying the problems under investigation (Ingleby, 2013, p.154). This means that it give the researcher an idea about what kinds of variables influence the problems under investigation and that nurses may face during the practice of health education, which may be considered when designing more valid measurement tools for this research.

Next, an expected advantage of a positivist approach is the development of methods to measure the effectiveness of social related practices, and assisting the researcher in understanding and explaining social related problems (Stoneham, 2005, p.139). These steps are important for a teaching or educational cultural competency project (Howard, 2006), meaning that they are also important for this study, as the aim is to design a culturally sensitive educational model. The model has to teach nurses how to deal with culture-related health education practices and what effective strategies need to be used. Furthermore, the positivist approach has characteristics that are open to hypotheses. It can test hypotheses and the efficacy of interventions as fixable and has an ideographic focus and scientific tentativeness, meaning that it allows the researcher to move forwards despite constant uncertainty. Hence, it is open to alternative hypotheses (Rubovits-Seitz, 2013).

One the other hand, the advantages of doing research based on an interpretive paradigm include: it helps to support the creativity of research as it reflects the researcher's engagement and ability to collect, analyze, understand and then reflect on the meaning of data (Ingleby, 2013, p.155). In addition, an interpretive approach is good in terms of giving meaning to or making sense of research results, because it is readily interpretable by practitioners, a point often omitted point in a quantitative approach (Goodwin & Goodwin, 1996, P. 108). Hence, this can help the creativity of this study when making a new model and that model requires an understanding of the data regarding cultural sensitivity in health education.

Moreover, Robson (2002) found that, in real world research, it is not possible for researchers to control or manipulate completely all the possible independent variables. In other words, if the researcher aims to control all variables, he/she has to set up a totally artificial situation; otherwise the researcher has to accept the truth that all the variables cannot be contorted together. Hence, it is not possible to guarantee that the cause and effect that are identified are in fact correct. The interpretive paradigm can help to generate an immediate description of the workplace environment and working conditions as a reflection of employees' experiences (Garrick & Rhodes, 2000, p. 210) of the working conditions and barriers that are reported as factors that influence hospital nurses' practice of health education; hence, considering this paradigm in this

study will help in identifying and understanding their impact on health education practice.

Therefore, and due to the complex nature of designing a practice-based culturally sensitive health education model, there is no single paradigm that can satisfactorily deal with all the required methodological aspects of this study. From the advantages of both paradigms, using multiple paradigms should provide the researcher with the chance to conduct a more complete study of the phenomenon under investigation and have a study design that has the advantages of multiple paradigms, which minimizes the limitations of using a single paradigm (Whitman and Woszczyński, 2004, p.122). In addition, Giddings (2006, p.195) states that "mixed methods could serve as a cover for the continuing hegemony of positivism, and maintain the marginalisation of non-positivist research methodologies". Doyle et al. (2009) agree and conclude that mixed methods afford researchers an opportunity to overcome the 'false dichotomy' between the two main paradigms.

Hence, this researcher believes that it is necessary to combine a quantitative/ positivist paradigm with a qualitative/ interpretive paradigm. The combination of these paradigms provides the researcher with the ability to analyse scientific data statistically whilst also recognizing the complex psychosocial and emotional factors that influence culturally sensitive issues. Therefore, due to the expected advantages and benefits of considering both main paradigms, this study has to consider two approaches.

The other type of mixed methods philosophies and the other paradigms' frameworks that are used to explore practice, the key challenges facing mixed method researchers and some of the key areas for capacity-building, such as pragmatism, praxis, proficiency and publication. This type of philosophical assumption over mixed methods is surrounded by a set of basic beliefs or assumptions which guide enquiries and those assumptions are called the world view. Hence, the mixed methods that researchers bring to their enquiries involve a world view composed of beliefs and assumptions about knowledge that inform their study (Creswell and Clark, 2011).

The philosophical belief of pragmatism is that it offers a direct and middle position between philosophy and the methodology of the research. This is because it sees that a problem has strong associations with mixed methods research, as mixed methods, and

pragmatism, are guided by action, thus justifying the choices made and the use of leads to provide a practical and outcome-orientated method of enquiry (Johnson and Onwuegbuzie, 2004). Hence, this paradigm eliminates doubt, it offers a method for selecting methodological mixes that can help researchers better answer many of their research questions (Cameron, 2011). This may not align with or limit it itself to a single philosophy or reality (Creswell, 2003). Sometimes it includes external rejections of philosophical dualisms over which agreement has not been historically forthcoming (Johnson and Onwuegbuzie, 2004). This philosophical paradigm means an approach that considers knowledge of the theory and practice of research and attempts to consider different points of view, perspectives and positions; and the standpoints of both qualitative and quantitative research will offer more data, thus filling in the blanks left by other methods (Johnson et al., 2007). This means that researchers who use such an approach need to be familiar with the key literature and debates on mixed methods, learn to take risks and able to justify their choices (Cameron, 2011).

Another philosophical paradigm concerns the praxis of mixed methods. Kelle and Erzberger (2004) mention that there are problems related to the praxis of mixed methods, and problems related to the combination of qualitative and quantitative methods, such as data integration, which restrict the level of the research design. The authors believe that data integration is often formulated superficially, based on methodological rules. It is not formulated in relation to any theoretical ideas about the nature of the subject area under investigation. The challenge according to Cameron (2011) is to make informed choices about the utilization and application of mixed methods designs, methods and data analysis, and hence, mixed methods researchers have to have a wide body of knowledge about the literature, research methodologies and, most importantly, data integration (Cameron, 2011). In addition, Tashakkori and Teddlie (2003) suggest another six areas that researchers need to be familiar with related to the praxis of mixed methods: research design and typology, sampling, data collection strategies, data analysis, inferences and inference quality. Hence, the paradigm here is about the practical application theory of mixed methods, and hence this paradigm believes that mixed methods researchers have to have a wide body of knowledge about the literature, research methodologies and, most importantly, data integration (Cameron, 2011).

The other type is about the beliefs of mixed methods and their advantages. The belief in mixed methods is a belief in their "complementary" nature. Andrew and Halcomb (2009) believe that mixed methods can provide "complementary" knowledge by utilising quantitative and qualitative methods. According to Creswell and Clark (2006) quantitative data provide a more general picture that can be expressed in numbers. This is needed for this study as the objectives represented by learning needs, barriers and cultural challenges have to be clearly identified in order to be prioritized. Meanwhile qualitative data will offer this study more detailed understanding of the objectives under investigation, which is needed in order to know how to use the findings to construct a better educational model. This means, for this research, that the questionnaire can focus on clearly identifying knowledge, skills and barriers, whilst the qualitative interview element focuses on the real world related to those issues, and understanding them in relation to the implementation of health education. Hence, according to Creswell and Clark (2006), to collect "complementary" information, it is important to follow a process of elaboration and clarification of required learning needs by switching from one method to another as necessary.

This approach has certain advantages, including maximizing the research findings and offering a better understanding of complex research questions (Creswell and Clark, 2011; Nykiel, 2007). The combination of quantitative and qualitative approaches as mixed methods can cover each other's limitations when evaluating data based on human choice, and the researcher can then exploit the advantages of each method in the evaluation of human behaviour (Johnson and Christensen, 2011). Moreover, "using quantitative and qualitative methods together in a mixed methods approach will paint a clearer picture of the research aim or question, rather than using each approach alone" (Andrew and Halcomb, 2009, p. 68).

There is, however, some literature that criticizes mixed methods (Hesse-Biber, 2010). Matthews and Kostelis (2011) mention that mixed methods in real world require more time, and in some cases more funding, for data collection. In addition, Tariq and Woodman, (2013) note that mixed methods require a team to deal with extensive data collection and analysis and, perhaps most importantly, to educate and convince others of the need to employ a mixed methods design so that such a study will be accepted by the scholarly community. Grafton et al. (2011) agree with the previous challenges;

however, looking at the complementary purpose of mixed methods is more important than looking at the challenges, and challenges are a common issue in all other types of research. Also, the previous discussion of the praxis paradigm ideates the possibility of dealing with such challenges by referring to pre-existing knowledge of mixed methods (Cameron, 2011).

### ***5.2.2.3 Using mixed methods for this study design***

The nature of the research questions, objectives and aims are the reason behind selecting specific research methods and the research design. The design must address the research aims and objectives (Andrew and Halcomb, 2009; Buchanan and Bryman, 2009). Also, it is important to bear in mind the study aims, as these link to the study design and methodology. For this study, there are certain reasons that underpin the selection of mixed methods. First, the study aims to design a practice-based, culturally sensitive educational model of health/patient education for hospital nurses. From the literature review findings and the conceptual framework of Jefferys (2006), it can clearly be seen that designing such a model has multiple factors and themes. These include: nursing knowledge and learning needs (cognitive domain); nurses' practices and skills (practice domain); cultural beliefs and values (knowledge of cultural context domain); and workplace-related obstacles that may affect the practice of health education. Jefferys (2006) states that identifying three dimensions – cognitive practice and affective which reflect knowledge of specific cultural context in order to build cultural competency in an educational framework requires a mixed methods approach.

In addition, there are the study objectives, which include:

- 1) Identify which health education skills are most valued by hospital nurses in Saudi Arabia;
- 2) Explore the self-perceived competence levels of Saudi hospital nurses when delivering health education;
- 3) Identify which aspects of health education knowledge are most valued by hospital nurses in Saudi Arabia
- 4) Identify any organisational barriers that might impact on the delivery of health education in Saudi Arabian hospitals;
- 5) Identify any strategies that might impact on improving the delivery of culturally sensitive health education in Saudi Arabian hospitals;



6) Develop an evidence-based, culturally and organizationally sensitive educational model of health education for use in Saudi Arabian hospitals.

The previous chapter has already discussed why these objectives were chosen and how they are related to the study aim of developing the model; however, by looking at the nature of the study objective, the first three are educational objectives. Creswell and Garrett (2008) mentioned that educational research required a large toolkit of methods and designs to address complex and interdisciplinary research objectives. The fourth objective focuses upon organizational barriers; a mixed methods approach was found to be useful for identifying major barriers to cultural competence in a hospice (Reese and Beckwith, 2014), which is similar to the main expected outcome of this study which seeks the cultural competency of health-patient education via education. Also, some health education studies, such as Park (2005), have used mixed methods to examine nurses' performance in patient education, which is also similar to third objective that measures the confident level of health education skills. Park mentions that mixed methods paint a more precise picture by integrating a broad range of objective and subjective data such as with this study.

### **5.2.3 Data collection tools**

The study is conducting a major project that aims to design a practice-based culturally sensitive health education model. This model requires identifying data related to multiple objectives with a focus on learning needs, knowledge and skills, barriers and culturally sensitive related strategies. Therefore, the selection of data collection tools according to Royse (2008) must hinge on the most effective data collection tools that can help the researcher to solve problems, support suspicions and hypotheses, and help achieve the research aim. In addition, it depends on the type of research, time and resources availability (Krishnaswamy et al., 2006). The selected tools must be based on clearly identified objectives to ensure that the tools are appropriate to the objective (Althoff et al., 2001). Therefore, for this research, a questionnaire and semi-structured interviews are selected for the following reasons.

### 5.2.3.1 *The questionnaire and its design*

Questionnaires have certain advantages and are used by this study for a number of reasons. The study planned to gather data in five hospitals situated over a large geographical area. According to Babbie and Mouton (2001) and Fowler (2002), a questionnaire is a useful quantitative survey tool that can describe the characteristics of a large number of participants over a broad geographical area. While according to Dörnyei (2003, p. 6), "it is an efficient tool in terms of researcher effort, it saves research time during data collection and analysis, which can be factored in at the planning stage, and is low cost".

In addition, two objectives of the study aim to identify which health education knowledge and skills are most valued by hospital nurses in Saudi Arabia. Meaning they measure learning needs for education purposes. Monsen et al. (2008) mention that if a study has an objective that includes identifying training needs in order to create an education project, then this objective can best be met through the use of a survey. Moreover, a well-designed questionnaire can elicit reliable, reasonable and valid data that are clearer, well numbered and organized, and via a generalizable approach that could be missing in some cases of qualitative data (Anderson, 1999). Meaning, this study should have more chances to achieve generalizability of its findings, which is important an outcome of the study.

Furthermore, the questionnaire, according to Redman (2003), is a useful learning needs assessment tool for health education experiences, which exactly reflects the first and second objectives. Furthermore, as a survey tool, it is considered a most effective technique that can describe and explain research objectives if individuals are the main topic of analysis (Babbie and Mouton, 2001), especially when taking the objectives into account. A questionnaire will be constructed to provide answers which fulfil the previously mentioned objectives of this study. Also, there are other studies with a similar purpose that have used questionnaires, such as Sidumo (2007) and O\*Net (2010). O\*Net, (2010) for example has developed a survey to measure learning needs in order to design an educational programme, as this study intends to do, and the O\*Net questionnaire is also used to measure knowledge and skills for this study. Therefore, a questionnaire is an ideal effective data collection tool that can help to achieve the study aim.

### ***5.2.3.2 Sources influence the questionnaire design***

A good questionnaire is difficult to construct and requires consideration of certain factors (Anderson, 1999; Carter & Thomas, 1997). The study considered several factors and recommendations prior to designing the questionnaire. The steps required for designing a questionnaire vary from one researcher to another. Bajpai (2011) for example mentions six steps to construct a questionnaire: decisions regarding the question format, structured questions versus unstructured questions, decisions regarding question relevance and wording, question sequencing, respondents' choices, questionnaire layout, and then producing a draft of the questionnaire.

Anderson (1999, pp.170-182) listed further steps: first ensure consistency and clear determination of the research questions or required information compared with the questionnaire questions. The challenge according to Gaag & Rijksuniversiteit (2005) is that it is difficult to construct a questionnaire that is consistent and comparable for all populations. The researcher has to limit cultural variation as much as possible, especially for a study that recruits multicultural respondents that reflect the same population.

In addition, the researcher has to have a full understanding of the constructed questions by brainstorming the meaning of research questions and the possible questions and choices to be used (Anderson, 1999). A challenge is that it is not possible to provide all the alternative questions and answers in one questionnaire, as an increase in alternative options would increase the time taken to respond (Bajpai, 2011).

Next, the researcher has to sequence the items, meaning to organize major and sub-questions, to give a clear structure to the respondents (Anderson, 1999). Also, the researcher has to think carefully about the participants portfolio prior to designing the questionnaire. This includes their demographic and any other related data that must be considered (Bajpai, 2011). Some types of questions such as closed-ended are difficult to construct because it is not possible to include all the possible alternative questions and answers of the respondents (Bajpai, 2011). Therefore, designing a good questionnaire is difficult and requires effort, resources and time, which could take between 10 and 50 hours. This includes additional time for a pilot study, revision and formatting (Anderson, 2005).

Also, the general design of the questionnaire was influenced by two additional sources. Chapter 4 has shown that the literature and the conceptual framework both highlight the need to identify five main domains: knowledge, skills, confidence level, workplace conditions and barriers, and culturally sensitivity development strategies. Chapter 4 has also shown the rationale behind creating study objectives based on the previous five main themes. Therefore, the questionnaire design has to follow and cover the study objectives. As the study has five main objectives, and the sixth objective is to design the model, then the design of the questionnaire has five parts, and each part covers one objective.

The additionally, source for the questionnaire design is that, in most cases, there are combinations and benefits from other validated questionnaires with similar aims and objectives. The rationale and reasons behind the consideration of some questionnaires such as O\*Net are explained in detail in the following sections.

#### **5.2.3.3. Why Likert scale.**

The questionnaire design can use an open- or closed-ended approach. The study also used semi-structured interviews, and both a open-ended questionnaire and semi-structured interviews have a similar approach to gathering data using open-ended questions. Therefore, a questionnaire with an open-ended approach is excluded. For closed-ended questions, there are three common approaches that can be used: Likert scale, semantic differential scale and Staple scale (Brace, 2013); here a Likert-scale type is selected over other approaches for several reasons.

The Likert scale was developed in 1932 by Rensis Likert as a technique to provide participants or respondents with a series of attitude dimensions. Respondents are asked to rate different levels of agreement on a scale, such as 3-, 4-, 5-, 6-, 7- or 9-point scales, depending on the research purpose. Likert's goal was that statements would provide different aspects of the same attitude. Then, the data analysis can be used to find similarities or differences regarding attitudinal statements (Brace, 2013).

One of the main advantages of a Likert scale is its simplicity for respondents. This is because it does not capture the complexity of attitude or beliefs being measured, each point or statement is giving a different level for discriminating that is related to the same statement (Michie, 2001). This is unlike a Thurston-type scale which allows the

use of unrelated options to the attitude being studied (Brace, 2013). This means a Likert scale covers issue more precisely and definitely issue with a lack of ambiguity (Michie, 2001; Neeraja, 2003). This is very important for this study as there are cultural beliefs and issues that need to be measured, and those reflect the complexity of Saudi culture hence, these require more clarity from the researcher. Also, the study requires clear and definitive answers regarding learning needs and barriers to health education or prioritization.

In addition, one of the study objectives is to measure the confidence level in health education skills, and a Likert scale can measure self-efficacy related objectives. This means it can reflect the respondent's judgment of his/her ability and what he/she can accomplish by rating his/her own skills. Hence, it helps to determine the self-efficacy level (Michie, 2001). Moreover, McClean (2012) reports that the advantages of a Likert scale are that it is easier to construct, it takes less time, reliability can be measured and it does not require judges. Oppenheim (1992), mentions that the reliability of a Likert scale tends to be high because of the greater range of answers permitted to respondents

#### **5.2.3.4 Five-point Likert scale**

The researcher has investigated different Likert scales and their appropriateness for this study. Hence, the questionnaire uses a five-point Likert scale rather than other such as 3, 7 or 9 scales for various reasons. First, three points are too few to distinguish between weak and strong options, and insufficient to discriminate among levels of agreement (Gracht, 2008). Five points are more reliable for different levels of respondents. Selecting more than five points might make it difficult for respondents to discriminate. Also, respondents can easily distinguish between moderate and strong options when using a 5-point Likert scale (Fan, 2008). Also using extra points, such as 7 or 9 points on a Likert scale, could increase the time for completing the questionnaire, especially if the questionnaire has many variables to be measured, and a five-point Likert scale provides sufficient discrimination among levels of agreement (Goodwin, 2010).

To set a midpoint for a Likert scale, the researcher followed Tsange's (2012) recommendations. These includes defining the midpoint as clearly as possible, such as using "moderately important" instead of using the number "3" as the midpoint. Also,

Tsange advises increasing scale sensitivity by increasing the number of scale options, meaning to use a 5- or 7-point Likert scale rather than 3 or 4 points, but this study uses a 5-point scale for the above reasons. The details for using a midpoint are explained in the following section.

### 5.2.3.5 *The questionnaire sections*

In order to organize the questionnaire design in relation to the study objectives, the questionnaire covers five objectives in four main sections (A, B, C and D), and each section covers one objective, except Section A which covers two objectives in two parts. Table (9) summarises the sections of the questionnaire and their role. To recall the study objectives, they are:

- 1) Identify which health education skills are most valued by hospital nurses in Saudi Arabia;
- 2) Explore the self-perceived competence levels of Saudi hospital nurses when delivering health education;
- 3) Identify which aspects of health education knowledge are most valued by hospital nurses in Saudi Arabia;
- 4) Identify any organisational barriers that might impact on the delivery of health education in Saudi Arabian hospitals;
- 5) Identify any strategies that might impact on improving the delivery of culturally sensitive health education in Saudi Arabian hospitals;
- 6) Develop an evidence-based, culturally and organizationally sensitive educational model of health education for use in Saudi Arabian hospitals.

**Table (9) The questionnaire sections**

<b>Section of the questionnaire</b>	<b>Objective covered</b>	<b>Objective/ goal</b>
<b>Section A</b>	Objective 1/ Part1	Measure the importance of H.E. skills.
	Objective 2/ Part2	Measure confidence in H.E. skills.
<b>Section B</b>	Objective 3	Measure the importance of H.E. subjects of knowledge.
<b>Section C</b>	Objective 4	Measure possible barriers of H.E. skills.
<b>Section D</b>	Objective 5	Measure recommended strategies for the cultural sensitivity of H.E.

Therefore, **Section A** is about health education skills. It consists of two parts: Part 1 and Part 2. The objective one is to identify which health education skills are most valued by hospital nurses. The O\*NET Resource Center (2012a) is the ideal source to obtain information about health education knowledge and skills that will be tested for this research for two main reasons. The O\*NET is the official organizational website for the U.S. Department of Labor, which sets the standards for the knowledge, skills and ability required, and responsibilities, for each profession, including health educators. Their standards are based on years of research using specially designed, validated and reliable questionnaires (O\*NET Resource Center, 2012b). Those questionnaires vary and are used to measure knowledge, skills, abilities, work context, work style and work activities for example (O\*Net, 2010). Then, the findings and level of importance of each area of knowledge and skills for each profession are regularly listed and updated on the O\*NET website (O\*Net, 2012a) which was used as the source for this study.

In addition, an important part of the standard for health educators skills of O\*NET is communication related skills, which are similar to the literature review findings and the skills recommended by both Jeffery (2006) and Pérez and Luquis' (2008) models of cultural competency and health education practical skills. Therefore, the content of health education skills was obtained from the O\*NET Resource Center, (2012a), as they reflect the regular updated findings of the O\*NET questionnaire. Those skills include: speaking & communication; active listening; critical thinking; appropriate selection of learning strategies ; problem solving, coordination; social interactions & perceptiveness; and time management. Those skills are obtained from the health educator skills of the O\*NET Resource Center, (2012a), which are ideal for use in this research for two main reasons.

Therefore, **Part 1 within Section A** measures the importance of these eight health educator skills using a Likert scale with five ratings from "not important" to "extremely important", with the midpoint as "moderately important" which covers the first objective. **Part 2 within section A** is about nurses' confidence in term of health education skills. The second objective was set to explore the self-perceived confidence levels of health education skills when delivering health education. Hence, the **Part 2** measures nurse's confidence in the same previous eight skills, using a scale from "not

confident" to "totally confident", with a selected midpoint of "some confidence", which covers the second objective.

**Section B** is concerned with health education knowledge. The third objective set is to identify which aspects of health education knowledge are most valued by hospital nurses. Hence, the **Section B** of the questionnaire measures the importance of seven areas of knowledge of health educators, with ratings from "not important" to "extremely important", which cover the third objective of this research. Those subjects of knowledge were also obtained from the O\*NET Resource Center (2012a), for the previous reasons for selecting O\*NET skills, and as they match the literature review findings. Those include: knowledge of education/teaching/instruction; English & Arabic language; knowledge of means of communications; basic knowledge of human psychology; counselling; administration & management; and basic knowledge of sociology & culture. The researcher does not need permission to use the O\*NET knowledge and skill questionnaires as it is mentioned by the O\*Net Resource Centre (2010) that no permission is needed to use it and it is free for everyone.

**Section C** is about possible barriers to the delivery of health education. The fourth objective is to identify any organisational barriers that might impact on the delivery of health education in hospitals. Hence, the **Section C** of the questionnaire measures nurses' working conditions and the barriers to health education in hospital settings. Aghakhani et al. (2012) is the only validated and reliable questionnaire designed to measure nurses' working conditions and barriers to health education in hospital settings. Thus, in addition to the literature review findings, most points from Aghakhani et al. (2012) were used to cover **Section C**, and the rest were modified by the expert panel to ensure it covers barriers in Saudi Arabia, as will be explained in the validity and reliability section. This section measures 14 factors as possible barriers using a Likert scale with five ratings from "no barrier" to "total barrier", with a "moderate barrier" midpoint. This covers the fourth objective and accords with the literature and conceptual framework, which highlight the presence of barriers and obstacles; and according to Jefferys (2006), these affect health education and nurses' learning motivation.

**Section D** is concerned with possible useful strategies to provide cultural sensitivity of health education. Therefore, the fifth objective is to identify any strategies that might



impact on improving the delivery of culturally sensitive health education. Hence, the nursing attitude towards those strategies covers the fifth objective. Unfortunately, the researcher could find no validated and reliable questionnaire that measures nurses' cultural and beliefs concerns related to health education practice; and most importantly, there appears to be nothing to reflect the unique and sensitive nature of Saudi cultural issues. Therefore, due to lack of validated questionnaires in this area, the researcher decided to seek help from a panel of experts with content validity, not only for **Section D** but for all points in the questionnaire design, even points from the O\*Net questionnaire to ensure that the questionnaire used is valid and reliable.

### **5.2.3.7 Validity and Reliability**

#### *5.2.3.6.1 Validity*

Validity is an important element within research and requires careful consideration. Creswell & Clark (2011) suggest that various enquiries are required to ensure the validity of data, results and interpretation, within a study that employs mixed methods approaches. In quantitative research, validity can occur when the revised scores that are obtained from the study participants are significant and there are meaningful indicators of the construct being measured. The standard that measures validity should be obtained from a resource external to the researcher and participants, such as a statistical procedure or external experts. Also the researcher has to consider evidence about content and construct validity.

Therefore, three sources were considered to ensure validity for the data collection tools. These include the literature review findings, benefit from previous studies of and research into the study's main themes. For this research, two types of validity were addressed in relation to this study's questionnaire: content, and face validity. Content validity was considered. Creswell and Clark (2010) and Curtis and Drennan (2013) state that content validity is the extent to which a questionnaire reveals what is known about specific issues. Creswell (2003), Curtis and Drennan (2013) and Polit and Beck (2008) all recommend certain approaches to ensure content validity. Creswell (2003) mentions that content validity is established by asking content experts, who are familiar with the topic under review and can make judgements about a data-gathering instrument, to provide an independent view of content validity.

The content validity of this questionnaire was discussed, checked and approved by ten people, working in four hospitals, acting as a panel of experts. To ensure that the panel members were really experts, this research was guided by Ayyub's (2001, p. 234) definition of an expert, i.e. "a very skilful person with much training in and knowledge of a special field". Thus the researcher contacted the General Directorate of the Aljouf Health Sector to request information about experts in fields related to this study who had to have specialized education and training and at least five years of experience in their field.

The members included: three qualified and licensed health/patient educators with 8 to 11 years of experience in health education; three qualified clinical instructors with 5 to 7 years of experience in nursing education; two nurse supervisors with training in nursing management and 9 to 12 years of experience; one head nurse with 5 years of ward management experience; and one licensed hospital social worker with 13 years of experience. This was done to ensure that cultural and belief issues were correctly reviewed by experts. In addition, the members were from three countries, Saudi Arabia, the Philippines and India, to ensure that the members were aware of the needs of and challenges to the multicultural workforce in Saudi Arabia.

The working agenda focused on four main issues: i) review the demands on nursing education for health-patient education based on the Saudi Nursing Policy and Procedures Manual 2011 (MoH, 2011b); ii) discuss the impact of Saudi culture on hospitals; iii) the working challenges of health-patient education.

The expert panel did make a small modification to the content of knowledge and skills to ensure that they address nursing workforce problems in Saudi Arabia. The O\*NET questionnaire measures the importance of knowledge of the English language, not English and Arabic which are used in this study. This was modified by the expert panel as there is a language barrier, and Arabic is the native language in Saudi Arabia while English is an official working language in the Saudi healthcare system. This modification is small and does not affect the validity of the content of knowledge of the O\*NET questionnaire.

Also the expert panel considered points from Aghakhani et al.'s (2012) questionnaire but added points to ensure it covered the literature review findings regarding culture-

related barriers to health education in Saudi Arabia. The panel added some points which include: lack of a common language and culture of communication with the patient and nurses' acceptance in community, as these reflect real barriers in Saudi Arabia which are not mentioned by Aghakhani et al. (2012).

The next step was to test the Content Validity Index (CVI) which is part of content validity process. According to Waltz et al. (2010), this is a measurement process that is used to quantify the extent of agreement between experts about the content of a measurement tool. The process started with general agreement on all 60 questions considered; the panel members were asked to look at all the questions and rate the relevance of each one using a rating scale with four points from "not relevant" to "very relevant". A 3- or 5-point rating scale could have been used but, according to Polit and Beck (2006), it is better to use a 4-point scale to avoid possibility of having a neutral ambivalent or midpoint which can occur if the CVI uses a 3- or 5-point scale. Hence, the questions that are seen as very relevant have to be retained, whereas those seen as not relevant can be removed. As a result, from 56 points, the scale for CVI was between 0.84 and 1.00 for 53 questions (see Appendix 1 for more details, p. 265). According to LoBiondo-Wood and Haber (2010), anything above 80 per cent denotes acceptable content validity. Hence, the other three points whose CVI was lower than 0.80 were removed.

The panel removed two skills (reading comprehension and learning strategies) from the ten O\*Net skills that are used in this study for two reasons. First, the expert panel agreed that all ten O\*Net skills for health educators are important and needed by health educators, but not all of them are needed by staff nurses. The panel believes that due to the nature of hospital nurses' practice of health education in the middle of busy working conditions, the skills required by hospital staff nurses in their practice of health education are less than the knowledge and skills required for full-time health educators which are used by O\*NET. Secondly, they removed items that do not match the literature review findings. Also, the panel removed one subject of knowledge (Clerical Knowledge) from nine subjects of knowledge for health educators for the previous two reasons. This removal does not affect the content validity of O\*Net which is used for this study. To preserve content validity, the researcher can delete or remove no more than 20% of the items of a validated questionnaire (Radhakrishna, 2007), and the removal here does not exceed 20%.

The second element of validity considered was face validity. Face validity was reviewed following to ensure that .. hat the final points of the questionnaire are suited to the study purpose. Face validity depends on whether or not a test looks valid for its intended purpose (Jackson, 2012). One of the suggestions to strengthen confidence in face validity is to ask the investigators about the questionnaire operational definitions, whether they are clear, make sense and reflect or measure what the study intends to do or not (Monette et al., 1990).

Therefore, the operational definitions of this study were obtained from the O\*Net knowledge and skills questionnaire. This is because the operational definitions of the O\*Net knowledge and skills questionnaire were formulated by O\*Net experts as part of the construct validity of the O\*Net knowledge and skills questionnaire. After that, the researcher asked ten frontline nurses (five staff nurses and five nurse managers) from different nursing departments to review the content of the questionnaire especially the about definitions used for each skill and each subject of knowledge of health education. Also the researcher asked about the overall questionnaire and its alignment with the study propose. The nurses commented that it is good and appears to be suitable for the study aims.

#### **5.2.3.6.2 Reliability**

The reliability "refers to replicability of the research results overtime, different sites and populations, and with different researchers" (Schensul et al., 1999, p. 271). The importance of reliability, as mentioned by Tappen (2011), is that it provides the highest possible quality of measurement tools used in research. It works together with validity considerations to represent the primary aspect of quality qualitative research. Also Creswell (2005, p. 597), added that "reliability means that individual scores from an instrument should be nearly the same or stable on repeated administrations of the instrument and that they should be free from sources of measurement error and consistent". Mitchell's (2000) suggests that reliability can be identified and strengthened by a Pilot study and Test-Retest. Pilot study was defined by Treece and Treece, 1977, as cited in Drummond & Campling (1996, p. 88) as " A small preliminary investigation of the same general character as major study, which is

designed to acquaint with the problem that can be occurred in preparation for the large research project".

Therefore, the first step taken to ensure and improve the reliability and internal validity of the questionnaire was a pilot study based on guidance from Peat et al. (2002). The process of the pilot study starts by selecting five participant nurses to do a pilot study. Then, the researcher administered the questionnaire in exactly the same way as planned for the main study. The researcher asked the participants for feedback to identify any ambiguities or difficulties in the questionnaire. The time taken to complete the questionnaire was recorded and it was accepted that 8 to 9 minutes was a reasonable time. A few modifications were made as a result of the pilot study. The only modifications were to differentiate and make clearer the definition of communication skills, which are part of health education skills, and means of communication which are part of the knowledge of health education. After the revision of both definitions by the expert panel, the researcher repeated the pilot study and received good feedback.

The second step taken to ensure reliability was a reliability test-retest. It measured the consistency of the measurement tools and is defined as "a statistical technique used to estimate components of measurement error by repeating the measurement process on the same subjects, under conditions as similar as possible, and comparing the observations" (Lavrakas, 2008, p. 888). Implementing the test-retest had a few problems. First, it was planned that the test-retest should be administered to at least 32 participants, as planned, in the approved ethical application, but only 22 nurses agreed to attend at the times and location planned for the two tests. Then, eight of the 22 participants gave an excuse for not attending the retest after doing the first test, for personal, work or emergency reasons.

The Retest was conducted as planned one week after the first test. Hence, the final number of participants who attended both test and retest was just 16. The questionnaires used for the reliability tests were not included in the final sample size of the study. Both tests were assessed using the Statistical Package for the Social Sciences (SPSS) v. 20 to analyse all the questionnaire answers. The level of consistency between both tests on all points was from 0.95 to 1.00 According to Thyer (2010),

these scores indicate that the questionnaire was reliable, as 0.70 is acceptable and anything higher is better.

### ***5.2.3.2 Semi-structured interviews***

The semi-structured interview is the second measurement tool of this research. It is used for this research for various reasons, but the main reason behind selecting this tool is to triangulate the findings. The aim of data triangulation is to eliminate or overcome the intrinsic bias that accrues from a single method, a single observer or researcher, or single-theory studies (Denzin, 1989). This means, according to Polit & Beck (2008), that multiple methods are used to validate the findings of each other and conclusions. Schensul et al. (1999, p. 149) defines a semi-structured interview as an "interview that consists of pre-determined questions related to domains of interest, administered to sample respondents to confirm study domains, and to identify factors, and items or variables of attributes for analysis or use in survey".

In addition, another important reason is that the researcher seeks triangulation of the research methods. Klenke (2008) mentions that using interviews in combination with other measurement tools, such as observations or surveys, is important in triangulating qualitative and quantitative findings further; it is about triangulating the methods used themselves. This means, according to Polit & Beck (2008), that there is a chance to evaluate consistency between multiple methods to provide a clearer picture of the phenomenon under investigation, such as in this study which uses mixed methods. As a result, this can increase the internal credibility of the research findings (Hussein, 2009). Watson (2008) concluded that using interviews is an effective triangulation tool in a research project that focuses on nurses' learning. Therefore, it is important for this new project, which covers new ground, and the researcher has to ensure that the findings are obtained by methods that are strengthened by triangulation.

Additionally and despite the role of triangulation, as the study uses mixed methods, other researchers also believe that interviews in combination with a survey can provide more useful findings (Nykiel, 2009). McConnell (2003) mentioned that semi-structured interviews are considered a very relevant and supportive tool for surveys and can validate information. Therefore, the interview is needed as this research needs a tool that can clarify or verify the information provided by a survey questionnaire.

Moreover, this study sample requires the inclusion of both staff nurses and nurse managers. The interview is a useful tool for investigating the characteristics of a group of people if the interviewee is aware of the identity of the group members around him or her, such as nurses and their managers (Gubrium and Holstein, 2011). Thus this study will have the benefit of interviewing staff nurses and comparing their answers with those of their managers. This can verify and identify differences between staff nurses and their managers regarding areas of investigation

Furthermore, the researcher seeks understanding of the findings. Due to the nature of the new project, this research requires a data collection tool that offers a deeper understanding and explanation of the study objectives and research focus, especially as it deal with two main themes culture-related issues, and learning needs. For learning needs, Watson (2008) is strongly recommend interview is an effective tool in research project that focus on nursing learning as it providing understanding rather than identifying of the factors that influence nursing learning. This because the single method will probably provide partial or limited information which may not reflect more analytical smart findings that build based on understanding, hence, it reflect less feature of distinguishing nurse learning needs. On the other hand, for cultural related issues, the interviews are often used for cross-cultural research and what is important is that they have the ability to access people's views, feelings and theories about causation or the issues under investigation (Øvretveit, 1998). The data that will be gathered will help to get ideas about unpredictable relations or theories concerning health education and culturally sensitive nursing practices.

It is also important however that the open ended questions relate to the study objectives. The first and third objectives of this study are educational related objectives. The study wants to know which subjects of knowledge and skills are most valued for health education practice. Both interview and Semi-structured interviews are often used in educational research because the researchers have the ability and the flexibility to design or ask direct questions about their research questions (Scott & Morrison, 2005). Hence, this researcher can ask direct questions about the most valuable or important subjects of knowledge and skills of health education. In addition, the fourth objective of this research is to identify workplace barriers that affect health education. Craig (2007) mentions that interviews can help to identify workplace

barriers that affect employees and the quality of their work. Hence, the tool can address the previous objective and is an ideal tool for this type of research project.

#### **5.2.3.1.1 Interview guidance protocol**

The interview guidance protocol is a list of questions to be asked and helps guide the researcher during the interview process and thus keep the research focus on track (Lodico et al. 2010). The researcher followed Creswell's (1998) guidance and recommendations for creating an interview guidance protocol. This includes developing a protocol based on a group discussion by an expert panel and consideration of the literature review findings. Therefore, the expert panel that reviewed the questionnaire content's validity discussed and developed questions for the interview guidance protocol. It was designed by drawing on concepts identified in the literature review, and the final questions used were intended to ensure that the questionnaire and interviews followed similar tracks and would allow comparisons.

Also, the questions were arranged in the most logical order and were asked using almost the same wording. The interview guides were adjusted to suit the particular experience of the participant related to the purpose of the study. The guidance protocol covered the four main objectives of the study: skills; knowledge; working conditions and barriers; cultural issues and beliefs, but as the study uses semi-structured interviews, these were not restricted by the guidance protocol; rather, this interview approach allows the researcher to control the questioning process using the guide prepared for questions.

Unlike a questionnaire which uses closed-ended questions, interview questions use an open-ended approach. The following questions are used to meet all objectives of the study. They include: What skills are required for health education?; What areas of knowledge required for health education?; What are the barriers to health education?; What are the cultural challenges to the delivery of health education?; What strategies are used to deal with cultural challenges?; What strategies could be used to develop a multicultural nursing practice of cultural sensitive health education? (for more details see Appendix 3 (page 269) for a copy of the guidance protocol used). The open-ended questions in semi-structured interviews provide opportunities to gather different kinds of responses to the focus of each question (Mukherjee, 1997). Hence, the interviews



make it possible to explore more deeply into personal experience related to the research question (DiCicco-Bloom and Crabtree, 2006; McConnell, 2003).

#### ***5.2.3.1.2 Piloting the interview protocol***

The pilot interviews have various benefits. They help the researcher to identify problems in the design of questions, the sequencing of questions or the procedure of the interview process, and they help to assess the validity and reliability of the interview protocol. This also tests the researcher's skills and ability in conducting interviews and provides the researcher with experience and practice in interviewing (Waltz et al., 2010 as cited in Grove et al., 2013, p. 424). Therefore, the researcher followed Waltz's et al., (2010) guidance for making a pilot interview, and arranged two pilot interviews, one with a staff nurses and one with a nurse manager (nurse supervisor).

The researcher conducted the in interviews using the same approach that is planned to be used in the data collection period. The researcher asked the interviewees for feedback regarding the clarity of the questions, the reliability of the questions and their relation to the culturally sensitive practice of health education, and also the researcher's communication skills and interview ability. Also, the researcher was able to learn about interviewee responses during the interviews, practise a real-life situation interview process, and most importantly the researcher got good feedback about the validity and reliability of the interview questions to reflect on the practice-based cultural sensitivity of health education. Finally, the data from the three pilot interviews were not included in the data collection, and the participants were not included in the final participation summary of the study.

#### **5.2.4 Sampling**

The sampling aim is to obtain data about the specific characteristics of a target population by studying a small sample of it (Tillé, 2006). Types include: probability and non-probability. The probability type tends to be used in quantitative research, and it is easier to notice error or bias than with non-probability; and hence this can be calculated or accounted for in the sampling and analysis. This enhances the possible generalizability of the study (Gerrish & Lacey, 2010). On the other hand, the non-probability sampling tends to be used in qualitative research. Unlike probability

sampling, the purpose here is to reveal truths about the phenomenon under investigation, and generalizability here is important (Gerrish & Lacey, 2010).

The probability type selects participants in a randomization approach, meaning each participant has a chance to be selected (Gerrish & Lacey, 2010). This type is preferable for use when there is an accurate and updated list of the population available (Gerrish & Lacey, 2010; Loiselle, 2011; Sekaran & Bougie, 2010). This approach is used in this study as the researcher seeks generalizability and there is an official up-to-date list of the study population. There are two additional factors that controlled the sampling and sample size of this research.

First, the target population is hospital staff nurses, but as the study planned to create an educational model to be used for hospital nurses, it is important to include nursing managers to gather data. Marquis and Huston (2009) mention that nurse managers may be more aware of the resources available and have training priority plans, while clinical nurses may have a greater understanding of the impact of education and cultural beliefs on the practice of health education. Staff nurses may be more aware of the practical skills that are needed to provide education with a view to achieving better practice. The objectives of the study include measuring learning needs for knowledge, skills and the confidence level of "staff nurses", also identifying the barriers to health education practice. These objectives are related to frontline staff nurses not nurse managers. Therefore, frontline staff nurses will be recruited for both survey and interviews data collection, while managers will be recruited for interviews only. This heterogeneity of the participants groups must be considered in the data findings. This will be explained in detail in the results chapter.

Secondly, originally the researcher had planned to recruit nurses from the whole of Saudi Arabia. This was, however, not possible due to many financial, managerial and bureaucratic problems, but the most important factor was that the study design required that detailed data be obtained from participants (staff and managers) in the same workplace to ensure that working conditions were the same, thus eliminating some possible variables. Therefore, it had to be conducted in one health sector for better management of the data collection process, which had to align with the study design. Hence, it was planned to conduct the study in the Aljouf region of northern Saudi Arabia.

As it was planned to conduct the study in one health sector, the researcher decided to invite all the hospital nurses in the Aljouf region of northern Saudi Arabia. The General Directorate of the Aljouf Health Sector (GDJHS), represented by its nursing department, cooperated with the researcher and provided detailed documents with nursing workforce statistics for the Aljouf region. Those documents show that there are 800 frontline staff hospital nurses working in direct contact with patients, and another 112 nurse managers. Hence, those 912 nurses represent both the total population and the total target sample size of this study. The recruitment and sampling process was agreed by the ethical panels of both Salford University and the GDJHS.

It was hoped to achieve a response rate of 70 % or higher, though the expected response rate was 60 %. Groves et al. (2009) state that 60 percent is good and 70 % is very good. 50% is an adequate response rate for data analysis (Groves et al., 2009; Rubin and Babbie, 2010).

For the interviews, it was planned to limit the sample size for the interviews by interviewing participants until data saturation was reached. Data saturation is "the point at which no new information or themes are observed in data" (Guest and Colleagues, 2006 as cited in Pequegnat & Stover, 1995, p.159). Guest et al. (2006) mention that the researcher can judge whether saturation has been reached or not based on theoretical saturation, which means the researcher judges saturation based on what is theoretically known about the issues under investigation; and therefore, he/she will have the ability to identify whether new themes are still emerging and to continue intervening, or that no new information is emerging and so stop.

There were two lists for the code names (not the real names) of employees provided by the nursing department of GDJHS, a list for staff nurses and a list for nurse managers, and in front of each name, there is a number from 1-800. To recruit the nurses, 120 invitation letters were sent to all six participants hospitals, meaning that, for each hospital, 20 invitation letters were sent via the internal hospital mail system. From the 20 invitation letters, 10 had to be sent to staff nurses, and 10 had to be sent to nurse managers. To ensure randomization in the participation, the researcher asked a visitor to volunteer and circle any 10 numbers on the list of staff-nurse names, and another 10 numbers on the list of managers' names. Then, the circled numbers received an invitation letter. This process was repeated exactly in each participant hospital.

### **5.2.5 Ethical considerations**

After obtaining ethical approval from the University of Salford, the researcher applied for ethical approval to conduct the study from the General Directorate of the Aljouf Health Sector (GDJHS), which represents the local Ministry of Health in northern Saudi Arabia. The ethical committee of the GDJHS is the only department that has the authority to give ethical approval for any research project being conducted in the health sector. This research study received ethical approval from the GDJHS with a memo being sent to all six participating hospitals to confirm their approval for the research project, and to ask those hospitals to cooperate with the researcher (see the acceptance letter in appendix 4, p. 271).

After obtaining the ethical approvals, the next step was to make ethical considerations for data collection. When designing the data collection tools, ethical considerations were important, i.e. confidentiality, privacy, risk and harm and informed consent based on guidance from studies by Long and Johnson (2007), MoH (2012b) and RCN Research Ethics (2009). The confidentiality of all data complies with the Data Protection Act (1998).

All participants received a copy of an information sheet giving details about the research aims, confidentiality, privacy, risk and harm. The return of a completed questionnaire was considered to be consent to participate as explained on the information sheet. To ensure anonymity of the questionnaire, the nurses are asked to return the questionnaire, in a sealed envelope, by putting it in a specially designed collection box located near the signing-in office in each hospital; nurses are made aware of this procedure on the information sheet. The researcher is the only sole key holder for this box.

For the interviews, participants were required to sign an informed consent form. This states that: the participant should read and understand the information about the project; has the right to ask questions; he/she can withdraw from the study at any time without giving a reason and without any penalty. Participants were given a copy of their consent form and the researcher retained the signed original (see Appendix 2 for a copy of the informed consent form and information sheet used, p. 267).

Confidentiality is important and so any information that might reveal the identity of participants should not be divulged to anyone outside the research, unless prior written authorization has been obtained. To ensure anonymity of the interview, participants were assigned code names and numbers to replace their names. Additionally, any personal information divulged during the interviews is held in a secure place and will not be disclosed to anyone apart from the researcher. The data are kept safe on the researcher's hard drive at the University of Salford in UK, which is password protected. Copies of the questionnaire were distributed, each with a sealed envelope into which the nurse should put the completed questionnaire, returning it within two weeks of receipt. The study asks demographic data but no personal information is requested by the questionnaire. The information sheet and consent form state that this study has the right to use the findings only for the purposes of this academic award and publication, and asks participants to confirm that they are happy with this.

Risk and harm are considered in order to minimise the possibility of these occurring, though no risk or harm to participants was expected. If, however, a participant became stressed or unwilling to talk during the interview, the researcher should explain verbally the nature of the research and the confidentiality process to promote a more friendly atmosphere. The researcher could stop or abandon the conversation until such concerns were sorted out and the participant agreed to continue or decided to terminate the interview. Moreover, Saudi Arabian culture and religion prevent a woman being alone with males in a private place (Tumulty, 2001); therefore, the researcher gave female participants the opportunity to be interviewed with another person with whom she felt comfortable being present.

### **5.3 Methodology implementation phases**

This section of the chapter focuses on the period of data collection. It discusses what happened in the study field while gathering data. In addition, there is a description of the analysis process. Also, the researcher reflects on the challenges faced during the data collection period.

#### **5.3.1. Questionnaire data collection**

The data collection process began directly after gaining ethical approval from the General Directorate of the Aljouf Health Sector (GDJHS). See Appendix 4 for a copy of the ethical approvals form University of Salford and GDJHS. The first step was to schedule distribution and visiting dates for each participating hospital as these were widely dispersed and preparation for travel was needed. Also, this step allowed the researcher to be on hand if participants in the hospitals needed further explanation of the study. The distribution process was the same in all six hospitals. The invitation letters, information sheets and questionnaires, complete with envelopes ready for sealing, were sent via the nursing office to all frontline hospital nurses via the hospital's mailing system. For completed questionnaires, in each hospital the researcher prepared a collection box which was located in the signing-in office so that nurses could find it easily, and they were aware of this step as it was clearly written on the information sheet. The researcher was the sole keyholder for these boxes, and the final date for leaving the completed questionnaire was the fifth day after the distribution date.

#### **5.3.2 Interview data collection**

The interview data collection process began by making arrangements for the interviews. This included arranging a place and time, obtaining informed consent and the interviewing process itself. During the planning stage, the researcher was ready to conduct interviews anywhere that suited the participants and would offer confidentiality; however, most of the interviewees preferred to be interviewed in the hospital during working hours. Some problems were, however, faced when arranging interview appointments. This was because all the expatriate nurses who agreed to participate were living in female staff accommodation provided by the Saudi MOH, where a man is not permitted to enter; also, the different genders are not permitted to

meet in public places, such as coffee shops, due to the gender segregation rules in Saudi Arabia. Hence, the only place left to meet was the hospital, where it is common to see men and women sitting, working or talking together due to the nature of their work. The researcher reported this problem to the nursing departments and they cooperated with the researcher by allowing participants to take one hour outside the rush-hour, or in their lunch hour if they wanted, to participate. As a result, the times for interviewing staff nurses were rescheduled many times based on participants' working conditions. This problem and the cultural segregation decreased the sample size and caused some participants to cancel their participation.

### **5.3.2.1 Obtaining informed consent**

Once participants had agreed to be interviewed the next step was to obtain informed consent. During distribution of the invitation letters, the researcher provided each participant with a copy of the informed consent and information sheet to ensure that they were making their decision based on a clear understanding of the nature of the study and that they knew their rights. Before starting each interview, however, the researcher gave a verbal explanation of the study aims, the research proposal, the procedures involved and any potential risks or benefits, along with ethical considerations, and answered all participants' questions. Also, the researcher gave participants sufficient time to decide whether they wished to continue or withdraw. Once interviewees confirmed verbally that they were ready, they were asked to sign and date a written consent form. After signing, a copy of the signed informed consent was given to each participants and the original was kept by the researcher. In order to ensure anonymity, the researcher coded the participant's name in a special way to match the coding of the interviews, and the codes are known only to the researcher.

### **5.3.2.2 Interview process**

The interview was a one-to-one process. The researcher categorized the participants into two groups, managers and staff nurses, with the staff nurses being the first group to be interviewed. This was so that the researcher could identify possible differences and ask the managers about issues that had been noticed during the staff-nurse interviews. The interviews were conducted in both Arabic and English as there were Saudis and English speaking expatriate nurses. Before starting the interviews the researcher tried to create a relaxed atmosphere, he provided tea or coffee and tried to

introduce a feeling of friendship. In most cases, there was no table between interviewee and researcher, except for Saudi female participants who feel shy if they sit very close to a strange man.

The interview process was conducted in accordance with the principles of King and Horrocks (2010) which provide more than the standard orientation to the procedures of qualitative interviewing. The interview process started with registration of the participant, and digital recording began using an Olympus VN-702PC digital recorder. The researcher started asking questions from the interview guidance protocol. The researcher used the same wording for each question for all interviews to ensure all answers were based on the same question unless the interviewee asked for an explanation. The researcher took notes in front of each question and in the same form as the interview protocol to report emotions and body language. If the participant made an interesting point, the researcher asked for more details by saying sentences like "tell me more" and "please explain".

To ensure the avoidance of bias during interviews, the researcher followed the steps advised by Connaway & Powell (2010); Macnee & McCabe (2007); and Nueman (2003) include: read each question using the same phrasing, emphasis and tone of voice; avoid feedback follow the participant's responses; avoid the purposeful alteration of participants' answers, omissions or rewording of questions in a way that guides interviewees toward specific answers (Nueman, 2003); and avoid influencing the participants' answers, e.g. by showing surprise, approval or disapproval (Connaway & Powell, 2010).

The interview duration was between 15 and 25 minutes for staff nurses, and around 35 minutes for nurse managers. The researcher did not intend to discuss matters further with managers rather, this difference was because the nurse managers provided more explanations, have more experience, and have administrative problems and different priorities which are not fully known about by staff nurses. On the other hand, the staff nurses appeared to have fewer concerns to talk about which mainly focused on work barriers or barriers to health education .

The researcher took notes during the interviews. These were to note issues that could not be digitally recorded, such as body language and voice tone, and he highlighted themes that seemed important. The researcher linked his notes with each question to



compare the answers to each question with corresponding notes. Recording the interview gave the researcher more time to conduct the interviews carefully and focus on small details that might have been missed while taking notes.

At the end of each interview, the researcher thanked the participant and registered the end time. Two copies of each interview were saved on the researcher's personal laptop and portable hard disc, all with secure pass codes. After the end of each interview, the researcher asked each interviewee about the experience, especially any limitations, in order to understand more about his approach and points of discussion. The interview digital records were sent to a licensed translation and transcribing agent for translation and transcription

### **5.3.3 Data Analysis**

#### 5.3.3.1 Questionnaire data analysis

The data analysis was done based on Creswell and Clark (2011) guidance of data-analysis process. The analysis of the questionnaire data began directly after all the questionnaires were collected. The researcher sought advice and worked together with an expert SPSS statistician in the UK to ensure that the data analysis process was accurate and reviewed by an independent SPSS statistician expert. This started by assigning numerical codes to the data, the researcher has created a codebook, then the researcher has enter questionnaire data into a statistical software package, SPSS v. 20. Once the data were processed and coded by SPSS, they were ready to be examined.

The study objectives do not seek to test specific hypotheses or correlations, or to deviate from the study objectives which want to identify specific variables and need to test the differences between variables. Therefore, the researcher seeks descriptive statistics, which means raw data that are transformed into a form that will make them easy to understand and interpret. This to be done by calculating averages, percentages and frequency distributions (Zikmund, 1994). Then, the researcher's next step was to identify the means of distributions. The mean is the average score of a distribution and is calculated by dividing the total sum of the scores by the number of scores (Healey, 2007). The importance of the mean for this study is that it is very reliable in the sense of drawing a large sample from the population. This is because the sample means that

result will be more stable to estimate the central tendency of the population. In other words, the mean is a reliable presentation of data that reflect the population (Howell et al., 2014; Macfie & Nufrio, 2005).

The next step was to use the Mann-Whitney test. This, according to Hawkins (2014), is used for analysing ordinal or scale data to test differences of central tendency between two unpaired or unrelated groups (such as Saudi and expatriate nurses in this study) taken from the sample in order to establish if the results can be extended to the entire population or related to one group more than another. The researcher tested the differences between each skill, subject of knowledge, barrier and selected strategy. Also, the researcher tested the differences between Saudi and expatriate nurses versus each group of skills, group of subjects of knowledge, group of barriers and group of cultural sensitivity development strategies. This helped the researcher to identify where greater learning needs, barriers and strategies should have more priority among groups. According to Kirk (2008), testing the ranks of results or observations rather than testing their numerical value is therefore more appropriate for behavioural and educational research studies such as this.

#### ***5.3.3.2 Reflection of the analysis***

Once the data analysis is complete, the next step is to reflect on the data findings. This has to be reported based on clear guidance criteria. This study has multiple objectives which include: learning needs, barriers and culturally sensitive strategies. For learning needs, identifying the immediate training priorities of learning needs was guided by the Hennessy-Hicks Training Needs Analysis Questionnaire and Manual (HTNAQM) (WHO, 2012). The first section of the questionnaire consists of two parts, each one has points rated on a 5-point scale in two different ways: i) how important a task skill is (Rating A); ii) how confident a nurse currently considers him/herself to be (Rating B). Comparing the A and B scores for importance/confidence provides an assessment of where the greatest training needs of health education lie – the greater the difference in scores, the greater training need. Table (10) summarises how the training needs priorities were identified based on differences between skills and confidence findings.

**Table (10) shows rating findings in relation to training priority**

<b>Results findings for skills</b>	<b>Training needs priorities</b>
Where a task is rated high on A (importance) and low on B (confidence),	High priority of training needs (important task, not well performed)
Where a task is rated low on A (importance) and low on B (confidence),	Lower training priority (unimportant task, not well performed)
Where a task is rated high on A (importance) and high on B (confidence),	No training priority (important task, well performed)
Where a task is rated high on A (importance) and high on B (confidence),	No training priority (unimportant task, well performed)
<b>Results findings for knowledge</b>	<b>Training needs priorities</b>
Where the importance of knowledge is rated high ( $M > 3.51$ ),	High training priority (important knowledge).
Where the importance of knowledge is rated moderate ( $M = 2.51 - 3.51$ ),	Lower training priority (moderate important knowledge).
Where the importance of knowledge is rated low ( $M < 2.51$ ),	No training priority (not important knowledge).

For barriers related findings, the study has set this following analysis criteria to control reporting the findings, and help in organizing and classifying the barriers. Based on these the analysis criteria. Table (11) shown the analysis guidance criteria, and based on this analysis criteria, the findings indicate that most of the measured factors perceived to be moderate or severe are barriers to the practice of health education.

**Table (11) shows the analysis guidance criteria for barriers**

<b>Result findings for barriers</b>	<b>Action priorities for barriers</b>
Where the level of a barrier is rated high ( $M > 3.51$ ),	Severe barrier (immediate action is required to remove it).
Where the level of a barrier is rated	Moderate barrier (a future action plan is

moderate ( $M > 2.51 - 3.51$ ),	required to remove or decrease it).
Where the level of a barrier is rated slight ( $M < 2.51$ ),	Slight barrier (no action plan is required to remove or decrease it).

For cultural sensitivity-related findings, the study has set the following analysis criteria as shown in Table (12) as guidance criteria.

**Table (12) shows the analysis guidance criteria for culturally sensitive strategies**

<b>Results findings for culturally sensitive strategies</b>	<b>Action priorities for barriers</b>
Where a strategy is highly recommended ( $M > 3.51$ )	Highly recommended (must be considered for culturally sensitive health education).
Where a strategy is moderately recommended ( $M > 2.51 - 3.51$ )	Moderate recommended (could be considered for culturally sensitive health education).
Where a strategy is little recommended ( $M < 2.51$ )	Slight barrier (no need to be considered for culturally sensitive health education).

The final criteria for the actions that can be used by the desired model were guided by Jefferys' (2006) prioritization, which was controlled by three principles: identifying immediate skills and knowledge training needs; identifying the major barriers to be attended to first if possible; use of the strategies most recommended for culturally sensitive care.

### **5.3.3.3. Interview analysis**

The analysis process began after the translation and transcription process was complete. The researcher used Creswell (2009) as qualitative analysis guidance for the semi-structured interviews. First, the interviews were transcribed and translated. All the interview records were sent to a licensed translating agent for translation and transcription from digital recordings to a text format. To ensure the accuracy of the translation and transcription of the interviews, the researcher sent two copies of one interview to two different licensed transcription and translation agents and compared the two transcripts once they were received. The drafts were matched. Also one

recommendation to test the accuracy of transcription and translation is to send a copy of the interview to the respondent and ask him/her if the transcript and translation reflect exactly what he/she was saying during the interview (Klenke, 2008); the researcher did this and got feedback from the interviewee that it was exactly as he remembered. The researcher felt that some data could be lost, not because of the translation or transcription, rather because, in some cases during the interviews, some Indian and Filipino nurses found it difficult to express what exactly was in their hearts and say it in English, as English is their second language, or in some cases they did not know the meaning of some words that could reflect what they wanted to say.

Once the data were in text format, the researcher started reading through them in order to get a general sense of their overall meaning. This in-depth reading helped the researcher to identify and clarify relevant codes and themes. The next step was to create and generate codes and themes, which entailed organizing the data into chunks or segments of text before bringing meaning to the information (Creswell, 2009). The importance of coding is that it helps the researcher to convert data from an incomprehensible form into an understandable form by finding links between data and sets of concepts or ideas that they hold, and that helps the researcher to go beyond the data (Coffey and Atkinson, 1996). Hence, once the researcher interacts with the data, he/she can facilitate the comprehension of emerging facts, then produce theory grounded in the data (Basit, 2003). Therefore, once data were broken down into segments, these segments were labelled with terms that described the data at different levels of abstraction. The researcher developed a coding book and used the same weighting scale used for the questionnaire as a standard for weighing the themes that appeared in the interviews. This made certain that the whole of the research had the same standard weighting criteria for all points of focus in order to control the analysis of the mixed methods.

The fourth step was to interpret the meanings of the themes. This was done by reading and rereading the interview texts, making notes and highlighting the main phases of each interview. The researcher created a matrix to help in organizing and identifying points to be remembered; all data had to be put into an Excel spreadsheet in order to manage the qualitative data analysis.

To ensure data interpretation was accurate, the researcher followed some researchers' recommendations (DiCicco-Bloom and Crabtree, 2006; Macnee & McCabe, 2007; Miles, 1979), including: first note the aforementioned considerations to prevent interview bias, e.g. accurate questioning, the avoidance of feedback or alteration of answers would lead to accurate interpretation (Connaway & Powell, 2010; Macnee & McCabe, 2007; Nueman, 2003). In addition, transcription and translation are part of accurate interpretation. DiCicco-Bloom and Crabtree (2006) mention that accurate interpretation depends on accurate translation and transcription; therefore, the researcher has to listen to the audio recordings while reading the transcripts to ensure accuracy during interpretation. In addition, the literature review and theoretical background serve as foundations of the study and its interpretation (Macnee & McCabe, 2007). Hence, during interpretation of the meanings of themes, the researcher recalled and looked carefully at the literature and what it may mean to help understand the data analysis and its interpretation, and this step was helpful to identify codes and themes clearly as there were matches with the literature review findings.

Moreover, Macnee & McCabe (2007) advise considering the researcher's knowledge and experience and using it to interpret the results (Macnee & McCabe, 2007). This researcher previously worked for years as a staff nurse, and then as a nurse manager, in the same place as the study, under the same working conditions, and so this makes it easier for the researcher to understand all the data provided by the participants, which must also help in accurate interpretation of the data.

Additionally, Miles (1979) advises the researcher to get feedback from the informants about their interpretation of the data and compare it with the researcher's interpretation. Therefore, after completing the data analysis, the researcher contacted two interviewees and asked them to review the data analysis findings of their interviews, and whether the researcher's interpretation matched what they meant during the interviews or not. The researcher also got positive feedback.

#### **5.3.3.4. Mixed methods analysis**

The analysis of the mixed methods was guided by Creswell and Plano (2011). This began by reading through the completed questionnaires and interview findings in order to link each finding to each objective. Then, the study presented the findings as four different categories, each category reflecting an objective. The next key step was to

compare the findings of the quantitative and qualitative data in order to confirm or identify any gaps between them. The final step is to discuss all the data in the next discussion chapter. Due to the presence of different objectives, the themes which appear will be highlighted and the discussion of themes will be grouped into respective themes. The study has to discuss the data with reference to other literature, evidence, theories and models of health education and the selected theoretical framework. This discussion should explain how these findings address the research purpose (Creswell and Clark, 2011). Hence, the research will be able to fulfil the aims of this study, build an educational model using the findings and guideline references, and make recommendations for possible local and global nursing practices along with their implications.

#### **5.4 Conclusion**

This chapter has set out the methods used in this study. The reasons for using a mixed methods approach have been presented and its use has demonstrated its value. Questionnaires can be an excellent source of information, especially for collecting a large amount of data from a large sample. Because of the way the questions were conceived, the analysis of these data will be clear and offer good results. The personal interviews facilitated the collection of more detailed data by giving the participants an opportunity to express their opinions, which adds depth to the data.

## **Chapter 6. Results**

### **6.1 Introduction**

This chapter will present the results of the data collected from the questionnaires and interviews. Because a mixed, quantitative and qualitative methodology is used, the study has generated large amounts of data, which are relevant to the aim and objectives of the study and rich in detail. Therefore, using the data analysis guidance in the methodology chapter (p.107), the chapter will present the findings in four sections based on the type of study findings and its objectives. Section One will present demographic data and the main themes of the findings; Section Two will present the findings about education-related objectives; Section Three will present the findings about barriers to health education; and Section Four will present the findings about strategies for the development of culturally sensitive health education. For each section, the chapter will present quantitative then qualitative data findings. This is because the quantitative findings answer the study objectives by stating what the answer is, while the qualitative findings address them by stating why the answers were selected. In some cases, there are similarities and shared themes between the qualitative and quantitative data findings; therefore, the researcher has to present similar or shared findings together to show whether they validate each other or are different from each other, and also to prevent repetition.

In addition, the study objectives do not seek to test specific hypotheses relations or correlations; however, as there is a multicultural nursing workforce in Saudi Arabia, it would be expected to do some tests for possible differences between Saudi and expatriate participants against variables (skills, confidence level, subjects of knowledge, barriers and the selection of strategies for culturally sensitive development strategies). To test these possible differences, the researcher was unable to make the nationality of the participants into a variable because nurses in Saudi Arabia are from more than 40 countries; instead, the study uses native speaking language as a reflection of the multicultural nursing workforce, e.g. Arabic reflects Saudi nurses, and other languages reflect European, Australian, American, and other Asian nurses. The researcher aimed to demonstrate the existence of these differences by using the Mann–Whitney test.



## 6.2 Demographic profiles of the participants.

The study recruited both staff nurses and nurse managers; and hence, the target total population for this study is 920, of which 800 staff nurses and 120 nurse managers. As previously mentioned in the methodology chapter, staff nurses can participate in both the survey and interview, while nurse managers can participate in the interviews.

The study used probability sampling type, meaning each participant has a chance to be selected (Gerrish & Lacey, 2010). The rationale of the sampling and recruitment process of subjects was explained in the methodology chapter (see page 96 for details). Thus, 800 questionnaires were sent to all the frontline hospital "staff nurses" in the Al-Jouf region of northern Saudi Arabia, and of those 800 staff nurses, 514 participated, which represents a 64% response rate. Also, for the interviews, it was planned to limit the sample size for the interviews by interviewing participants until data saturation was reached. In the real data collection period, another 15 nurses participated in the interviews. Therefore the total number participants of in this study is 529.

In the interviews, 15 nurses participated, nine of them are nurse managers, and 6 staff nurses. Those include three clinical nurse instructors, three nurse supervisors, three head nurses and six staff nurses, with 11 female and four male nurses. In Saudi Arabia, clinical nurse instructors, head nurses and nurses' supervisors all fall under the category of nurse managers. The number of participants was limited to 15 for three main reasons, as reported verbally by the nurses. First, expatriate nurses know that Saudi managers and supervisors feel uncomfortable about people talking about them, especially because answers to interview questions might emphasise the performance of staff and managers regarding the practice of health education. Culturally, this can be explained as "you are spying on me and reporting me". Therefore, most of the expatriate nurses preferred not to participate.

In addition, the researcher felt that data saturation was reached after 15 interviews, which means "reaching the point at which no new information or themes are observed in data" (Guest and Colleagues, 2006 as cited in Pequegnat & Stover, 1995, p.159).

The following details represent the demographic data of the survey participants (staff nurses). They show that almost half of the participants have a diploma and the other half have a bachelor degree. Also, half of the participants speak Arabic and the other

half speak native languages other than English, meaning there are multicultural participants. Also, half of the participants have only four or less than four years of experience as staff nurses. Their experiences are varied. Likewise, the area in which a participant works might affect the results. Tables 13, 14, 15 and 16 summarise the demographic characteristics of the survey participants.

**Table 13. Native tongue**

Language	Percentage	Frequency
ARABIC	47.1%	242
ENGLISH	0.8%	4
Valid OTHER	51.8%	266
Missing data	0.4%	2
Total	100.0	514

**Table 14. Qualifications**

Qualification	Frequency	Percent
DIPLOMA	246	47.9%
BACHELOR	267	51.9%
MASTER OR PhD	1	.2%
Total	514	100.0%

**Table 15. Working department**

Working department	Frequency	Percent
Medical	60	11.7
Surgical	61	11.9
Day surgery	4	.8
Emergency department	73	14.2
Paediatrics	42	8.2
Operating room	37	7.2
Obstetrics and gynaecology	42	8.2
ICU	74	14.4
OPD	44	8.6
Other	77	15.0
Total	514	100.0

**Table 16 the work experiences**

Work experience	Frequency	Percent
1-2 YEARS	131	25.5%
3-4 YEARS	134	26.1%
5-6 YEARS	79	15.4%
7-8 YEARS	54	10.5%
9-10 YEARS	36	7.0%
More Than 10 YEARS	79	15.4%
Missing data	1	.2
Total	514	100.0

### 6.2.2. Main themes of the findings

The findings from both qualitative and quantitative data have several themes and subcategories depending on the objective of the study. The main themes are similar, the subcategories, however, have some differences. The qualitative findings did add new and unexpected additional findings due to the use of open-ended questions about each study objective. The quantitative data, for example, identified several important subjects of knowledge and skills of health education, while the qualitative data added several educational factors, such as language consistency between nursing educator/instructor and staff nurses, and similar to the barriers to health education to which the qualitative data findings added the presence of an administration-related barrier to health education. The following table (Table 17) summarises the main identified themes and their subcategories of both qualitative and quantitative data findings.

**Table 17 Comparison between the findings of qualitative and quantitative data main themes** Health Education (H.E.)

Qualitative data findings		Quantitative data findings	
Themes of education-related objectives		Themes of education-related objectives	
Theme	Subcategory	Theme	Subcategory
1- Learning needs of health education	1- General comprehensive education of health education 2- The need for specific knowledge of and skills in health education	1-Learning needs of health education	1- Important subjects of knowledge for H.E. practice 2- Important skills for H.E practice, and
2- Educational problems of health education	1- Role of language in nursing education (language inconsistency between student nurses and nurse instructor). 2- Quality of nursing training /education in health education.		3- Nurse's confidence level in H.E. skills

Theme of barriers to health education		Theme of barriers to health education
Subcategory		Subcategory
1- Nurse-related barriers 2- Workplace-related barriers 3-Administration-related barriers		1- Nurse-related barriers, 2- Work-related barriers
Themes of the strategies for developing cultural sensitive health education		Theme of the strategies for developing cultural sensitive health education
Theme	Subcategory	Subcategory
1-Dealing with the family role in the Saudi community	1- Positive family role, 2- Negative family role	1- General strategies to develop culturally sensitive health education. 2- Development of a multi-cultural nursing workforce. 3- Dealing with the gender-segregation cultural value
2- Involvement of expatriate nurses	1- Involvement in higher level of decision-making 2- Involvement in teaching Saudi nurses and sharing experiences.	
3- Dealing with Saudi cultural norms	1- Dealing with the gender segregation cultural norm. 2- Dealing with ethnicity differences in education	
4- Cooperation with community & public health organizations	1- Cooperation with primary healthcare centres to take a role in health promotion.	

### 6.3. Section 2. Education objectives-related findings.

The study has three education-related objectives. One of the study questions/objectives was to identify which health education skills are most valued by hospital nurses in Saudi Arabia. In addition, another study objective seeks to explore the self-confidence levels of Saudi hospital nurses vis-à-vis the same health education skills when delivering health education. Those skills include: speaking and communication; active listening; critical thinking; the appropriate selection of learning strategies; problem-

solving, coordination; social interaction and perceptiveness; time management. Also, the study wants to identify which subjects of knowledge of health education are most valued to be able to offer health education. Therefore, this section addresses the first, second and the third objectives of the study.

### 6.3.1. Quantitative data findings about education-related objectives

#### 6.3.1.1 Health education skills

One of the study research questions/ objectives was to identify which health education skills are most valued by hospital nurses in Saudi Arabia. The survey findings indicate that the majority of the measured skills are important for nurses to engage in health education in the hospital setting. In addition, the results show that nurses are lacking in confidence about their performance of those valued skills. In addition, the results indicate that there are some statistically significant differences in terms of some of the measured skills between Saudi and expatriate nurses. On the other hand, the interview findings do not really clarify the importance or nursing performance of those skills, the results from the interviews do raise other concerns and provide some explanations, which can clarify why these results were obtained.

To start with the communication skills, **Communication skills** are perceived as important to the performance of health education for hospital nurses. These refer to the nurse's ability to talk to patients and families and convey information effectively. There are different levels of importance ranked by the staff (see Table 18). Almost all the staff ranked them as highly important, with only a few considering them not very important. The mean score for this skill (M= 4.22) indicate that communication is a highly important skill.

Table 18 showing **Communication skills**. A. - Ranking of importance.  
B. - Nurses' % of confidence in this skill

A Ranking of importance of communication skills	Extremely important	Highly important	Moderately important	Slightly important	Not important	Mean
% of nurses	39.5%	47.1%	8.9%	3.1%	1.4%	4.22
B. Confidence of nurses	Totally confident	Very confident	Some confidence	A little confident	No confidence	Mean
% of nurses' confidence	13.2%	27.2%	39.1%	17.3%	3.1%	3.30

There is, however, a statistically significant difference between Saudi and expatriate nurses regarding the perception of the importance of communication skills for health education practice. In the following table (19), the mean score for expatriate or non Arabic speakers was 4.20, while it was 4.21 for Saudi or Arabic speaking nurses. The p value ( $p=0.027$ ) is smaller than 0.05. This value indicates the presence of a statistically significant difference in terms of a participant's native language and the perception of the importance of speaking and communication skills. More expatriate nurses (who speak other languages) than Saudi participants agreed with speaking and communication skills being important. This may be due to the language barrier that is felt by the expatriate nurses, as shown in the findings of the following section.

**Table (19). Summary of the statistical significant differences between Saudi and expatriate nurses regarding the perceived importance of each skill of health education**

Importance of skill	Mann–Whitney U	Asymp. Sig. (two-tailed)	Summary of statistically significant differences between groups	Mean scores between groups	
				Arabic	English or other
Perceived Importance of Speaking and Communication	29293.500	0.027	There is a statistically significant difference	Arabic	4.21
				English or other	4.20
Perceived Importance of Active Listening	29842.500	0.065	No statistically significant difference	Arabic	4.67
				English or other	4.24
Perceived Importance of Critical Thinking	30291.000	0.134	No statistically significant difference	Arabic	3.41
				English or other	3.53
Perceived Importance of Appropriate Selection of Learning Strategies	30999.500	0.282	No statistically significant difference	Arabic	3.97
				English or other	4.10

Perceived Importance of Problem Solving	32065.500	0.699	No statistically significant difference	Arabic	4.25
				English or other	4.13
Perceived Importance of Coordination	30168.000	0.106	No statistically significant difference	Arabic	3.94
				English or other	4.46
Perceived Importance of Social Interactions and Perceptiveness	26645.000	0.000	There is a statistically significant difference	Arabic	3.66
				English or other	4.01
Perceived Importance of Time Management	31436.500	0.445	No statistically significant difference	Arabic	3.39
				English or other	3.82

On the other hand, the majority of the participants consider that they are moderately confident (see table 18B) about communicating with patients and other staff. The mean (M=3.30) indicates that hospital nurses in Saudi Arabia do have a moderate level of confidence in their communication skills. In addition, in the following table (20) regarding the statistically significant differences between each nurse's confidence levels in each skill of health education, the p value (p=0.088) is larger than 0.05, which indicates that there is no statistically significant difference between Saudi and expatriate nurses regarding their confidence level in terms of communication skills among the participants. The mean score for expatriate or non Arabic speakers was 3.23, while it was 3.38 for Saudi or Arabic speaking nurses. Therefore, the conclusion, based on the analysis criteria, indicates that despite their level of confidence, communication skills for health education are a training priority for hospital nurses in Saudi Arabia due to their importance

**Table (20). Summary of the presence of statistically significant differences between Saudi and expatriate nurses regarding their confidence levels in terms of each skill of health education**

Importance of skill	Mann–Whitney U	Asymp. Sig. (two-tailed)	Summary of statistical significant differences between groups	Mean scores between groups	
				Arabic	English or other
Perceived Level of Confidence in Speaking and Communication	29944.500	0.088	No statistically significant difference	Arabic	3.38
				English or other	3.23
Perceived Level of Confidence in Active Listening	31622.500	0.507	No statistically significant difference	Arabic	3.95
				English or other	3.89
Perceived Level of Confidence in Critical Thinking	29010.500	0.021	There is a statistically significant difference	Arabic	2.93
				English or other	3.09
Perceived Level of Confidence in Appropriate Selection of Learning Strategies	31865.000	0.612	No statistically significant difference	Arabic	2.82
				English or other	2.77
Perceived Level of Confidence in Problem Solving	32439.000	0.884	No statistically significant difference	Arabic	2.84
				English or other	2.91
Perceived Level of Confidence in Coordination	31567.000	0.489	No statistically significant difference	Arabic	2.82
				English or other	2.77
Perceived Level of Confidence in	27103.000			Arabic	2.92



Social Interactions and Perceptiveness		0.000	There is a statistically significant difference	English or other	3.21
Perceived Level of Confidence in Time Management	32534.500	0.937	No statistically significant difference	Arabic	2.98
				English or other	2.96

Similar to communication skills, **Active listening** is also widely reported as important. Active listening describes the nurse's ability to listen carefully to feedback by sharing a patient's thoughts and feelings about his/her needs. The majority of nurses reported that active listening is highly important (see Table 21A) with only a few ranking it as not important. The mean (M=4.44) indicates that the nurses consider it a very important skill. In addition, as shown in a previous table (20), there is no statistically significant difference between Saudi and expatriate nurses regarding agreement of the importance of active listening skills for health education practice as the p value = 0.065, which is larger than 0.05. The mean score for Arabic speaking or Saudi nurses was 4.67, while it was 4.24 for expatriate or non Arabic speaking nurses.

Table 21 showing **Active listening skill**. A- Ranking of importance  
B - Nurses' % of confidence in this skill

A Ranking of importance of active listening skill	Extremely important	Highly important	Moderately important	Slightly important	Not important	Mean
% of nurses	42.3%	43.8%	10.7%	2.5%	0.4	M=4.44
B. Confidence of nurses	Totally confident	Very confident"	Some confidence	A little confident	No confidence	Mean
% of nurses' confidence	6.6%	17.3%	43.4%	26.3%	6.4%	M=2.92

Despite this importance, most participants show different levels of confidence. The majority obviously have problems with this skill (see Table 21B). The mean at M=2.92 shows that the nurses' confidence level is below "somewhat confident". In addition, as shown in table (20), there is no statistically significant difference between Saudi and

expatriate nurses regarding their confidence in their active listening skills, which is shown by the p value for this factor being  $>0.05$  ( $p=0.507$ ). The mean score for Saudis was 3.95, while it was 3.89 for the expatriate nurses. This means that both groups of nurses may have similar perceptions regarding their confidence level in terms of active listening. Therefore, training in active listening skills is a priority, as it is a very important skill and both groups of nurses lack confidence in it.

The results focusing on the **Appropriate selection of learning strategies** show that it is a very important skill, as indicated by its mean ( $M=4.04$ ). It is defined as the ability to select and use ideal instructional methods and procedures that are appropriate for the situation when teaching something to patients. The majority of participants (see Table 22) consider it very important, with only a few who think it is not so important. In addition, there is no statistically significant difference between Saudi and expatriate nurses regarding the perceived importance of the appropriate selection of learning strategies, which is indicated by the p value ( $p=0.282$ ) (see the above table 19). The mean score for Saudi nurses was 3.97, while it was 4.10 for expatriates or English.

Table 22 showing **Appropriate selection of learning strategies**  
A- Ranking of importance by nurses. B - Nurses' % of confidence in this skill

A Ranking of selection of learning strategies	Extremely important	Highly important	Moderately important	Slightly important	Not important	Mean
% of nurses	31.3%	46.5%	17.5%	3.9%	0.8%	M=4.04
B. Confidence of nurses	Totally confident	Very confident	Some confidence	A little confident	No confidence	Mean
% of nurses confidence	2.5%	19.8%	41.8%	26.5%	9.3%	M=2.80

In addition, there is a lack of nurses' confidence in this important skill. The majority of participants believe they are not confident or have doubts about their ability to select appropriate learning strategies. The mean ( $M=2.80$ ) confirms the lack of nurses' confidence in their ability in this skill (see Table 22). However, as the p value = 0.612, which is greater than 0.05, these findings indicate that there is no statistically significant difference between Saudi and expatriate nurses regarding their confidence levels towards the appropriate selection of learning strategies (see table 20). The mean

score for Saudi or Arabic speaking nurses was 2.82, and it was 2.77 for non Arabic speaking nurses.

Hence, both results indicate that nurses require good training and an appropriate selection of learning strategies as a training priority.

The **Skill of coordinating patient education activities** is perceived by the nurses as highly important. This is the skill of adjusting actions and planning in relation to others' actions, communicating with other colleagues to arrange for patient educational activities and being flexible about changes which have to be made. Many participants consider this to be an important skill and only a few do not consider it important. The mean (M=4.21) does indicate that it is a highly important skill (see Table 23). In addition, as shown in table (19), the mean score 3.94 for Saudi, and 3.64 for the expatriate nurses indicates that there is no statistically significant difference between Saudi and expatriate nurses regarding the perceived importance of coordination, which means that all participants agree on this skill's importance (p=0.106).

In addition, the overall level of confidence in this skill is shown to be moderate. Only a very small percentage feel very confident in this skill (see Table 23). The mean (M=3.02) reflects that the nurses have a moderate level of confidence in their ability to coordinate patient education. On the other hand, there is no reported a statistically significant difference between both groups of nurses regarding their confidence level in terms of coordination. The mean score for Saudi nurses is 2.82, and 2.77 for the expatriate nurses, and the p value is 0.489, which is greater than 0.05, as shown in table (20). Therefore, the conclusion is that despite its importance, this skill is not a training priority as a means of confidence (M<3.02).

Table 23 showing **Coordination of patient education activities skill**

A- Ranking of importance by nurses.

B - Nurses' % of confidence in this skill

A. Ranking of coordination	Extremely important	Highly important	Moderately important	Slightly important	Not important	Mean
% of nurses	30.7%	47.5%	16%	5.1%	0.6%	M=4.21
B. Confidence of nurses	Totally confident	Very confident	Moderately Confident	Not very confident	No confidence	Mean
% of nurses' confidence	4.3%	19.9%	37.7%	31.1%	7%	M=3.02

**Problem-solving skills** are also perceived as important. This means understanding the implications of information provided by a patient to a nurse, which is statistically significant for both current and future problem-solving and decision-making in health education. It is considered very important by the majority of the nurses with only a few who do not consider it so (see Table 24). Hence the mean (M=4.18) is a reflection of the high ranking of this skill. However, there is no statistically significant difference between Saudi and expatriate nurses regarding the perceived importance of problem solving, as the mean score for Saudi nurses is 4.25, 4.13 for the expatriate nurses, and the p value = 0.699, which is greater than 0.05 (see table 19).

Table 24 showing **Problem-solving skills of health educators**

A- Ranking of importance by nurses.

B - Nurses' % of confidence in this skill

A. Ranking of problem solving	Extremely important	Highly important	Moderately important	Slightly important	Not important	Mean
% of nurses	35.8%	42%	17.1%	4.5%	0.4%	M=4.18
B. Confidence of nurses	Totally confident	Very confident	Moderately confident	Not very confident	No confidence	Mean
% of nurses' confidence	0.2%	19.3%	41.1%	27.8%	8.2%	M=2.88

Similarly, with active listening, the nurses are also shown to have low confidence levels in this problem-solving skill though there are a few participants who are very confident about their ability in this skill. Hence, the mean (M=2.88) demonstrates that the perceived level of confidence in problem-solving is low (see Table 24). In addition, as shown in table (20) and is similar with the majority of the previously measured skills, the nurse's confidence levels in terms of problem solving skills showed no statistically significant difference between both groups of the participants, with a p value = 0.884 as the mean score for Saudis is 2.84, while it was 2.91 for the expatriate nurses. Therefore, comparing the results for both importance and confidence, training nurses in problem-solving skills is a training priority.

The skill of **Social interaction & Perceptiveness** is also reported as important. It means being aware of patient and family's social reactions and understanding why they react as they do in relation to culture. Most of the participants ranked it as highly

important, with only a few ranking it as not important (see table 25). Hence, the mean (M=3.84) makes this a very important skill. Similarly to communication, as shown in table (19), this skill demonstrated a statistically significant difference between Saudi and expatriate nurses, and the p value (p=0.000), which is smaller than 0.05, indicates this finding. The expatriate nurses more often agreed with the importance of this skill than the Saudis. The mean score for Saudis is 3.66, while it is 4.01 for the expatriate nurses. This means that expatriate nurses might need these skills more than Saudi nurses, as they feel that they need it more than the Saudi nurses, who are more aware of the Saudi cultural values, beliefs, and norms.

Table 25 showing **Social interaction & Perceptiveness**

A- Ranking of importance.

B - Nurses' % of confidence in this skill

A. Ranking of importance of Social interactions & Perceptiveness	Extremely important	Highly important	Moderately important	Slightly important	Not important	Mean
% of nurses	24.3%	46.5%	20.0%	7.6%	1.6	M=3.84
B. Confidence of nurses	Totally confident	Very confident"	Some confidence	A little confident	No confidence	Mean
% of nurses' confidence	5.1%	16.7%	42.4%	26.8%	8.8%	M=3.07

On the other hand, the majority of the participants have some confidence in their Social interaction & Perceptiveness skills, and the mean score (M=3.07) validates that. Therefore, training in Social interaction & Perceptiveness skills is another training priority as it is an important skill and nurses lack confidence in it (see Table 25). In addition, this skill represents another statistically significant difference between the participants. The p value (0.000), as shown in table (20), indicates the presence of a statistically significant difference between the Saudi and expatriate nurses regarding their confidence levels in terms of social interaction and perceptiveness skills. The mean score is 2.92 for Saudi nurses, and 3.21 for the expatriate nurses. More expatriate nurse selected lower ratings of their confidence level in terms of social interaction and perceptiveness skills. This may be due to barriers that may prevent them from being confident in their social interactions, such as communication.

Two skills have similar results, Critical thinking and Time management. The **Critical thinking skill** means using logic and reasoning to identify the strengths and

weaknesses of alternative solutions, conclusions or approaches to problems. There are many nurses who rank it as very important and only a few who do not consider it important (see Table 26). The mean (M=3.48) indicates that this skill is moderately important. In addition, there is no statistically significant difference between participants regarding the perceived importance of critical thinking skills (see table 19). The mean score for Saudi nurses is 3.41, while it was 3.53 for the expatriate.

Table 26 showing **Critical thinking skills**. A- Ranking of importance by nurses.

B - Nurses' % of confidence in this skill

A Ranking of critical thinking	Extremely important	Highly important	Moderately important	Slightly important	Not important	Mean
% of nurses	13.8%	35%	37.2%	13%	1%	M=3.62
B. Confidence of nurses	Totally confident	Very confident	Moderately confident	Not very confident	No confidence	Mean
% of nurses' confidence	5.1%	16.7%	42.4%	26.8%	8.8%	M=3.01

Similar to previous skills, the nurses appear to lack confidence in their ability to perform this skill, though there are a few who are totally confident that they can use this skill (see Table 26). Hence, the mean (M=3.01) indicates that the nurses' confidence level in this skill is moderate. In addition, there is no reported statistically significant difference between both groups of nurses, as the mean score for Saudi nurses is 2.93 while it was 3.09 for the expatriate nurses, and the p value = 0.134 (see table 20). Therefore, the conclusion from the results for both importance and confidence is that training in critical thinking is not a priority.

Lastly, **Time management skill** which means the ability of nurses to manage their own time in order to save time and be able to provide health education. The majority of nurses consider this skill is important. The mean (M=3.62) indicates that this skill is moderately important for the performance of health education (see Table 27). In addition, similarly to most of the reported findings, there is no statistically significant difference between both groups of participants regarding the perceived importance of time management skills as the mean score for Saudis is 3.39, while it was 3.82 for the expatriate nurses, and the p value was greater than 0.05 (p=0.445) (see table 19 for details).

On the other hand, the majority of participants report a lack of confidence in this skill which they perceive as important. Most of the participants considered they are only moderately confident in their ability in this skill, although a very few consider they are more than confident to perform it. Hence, the mean (M=2.96) indicates that nurses are not very confident in this skill (see Table 27). In addition, the p value (p=0.937) indicates that there is no statistically significant differences between both Saudi and expatriate nurses, the mean score for Saudis is 2.98, while it was 2.96 for the expatriate nurses (see table 19). Therefore, training in time management skills is a secondary training priority.

Table 27 showing **Time management skill** A- Ranking of importance by nurses.  
B - Nurses' % of confidence in this skill

A Ranking of critical thinking	Extremely important	Highly important	Moderately important	Slightly important	Not important	Mean
% of nurses	19.1%	30%	29.2%	18.1%	3.5%	M=3.62
B. Confidence of nurses	Totally confident	Very confident	Moderately Confident	Not very confident	No confidence	Mean
% of nurses' confidence	7.8%	22.8%	36.4%	24.3%	8.8%	M=2.96

As a group of skills, it is clear from the results of the following table (28) that there are no statistically significant differences in the responses of the study participants regarding the perceived importance of all measured H.E. skills for nurses. These may be regarded as conditions for success in the health education processes according to the variable of native language, which may be attributed to convergence in the work environments within Saudi hospitals and nurses' close contact with patients, which make them understand the importance of these different skills in order to enable them to deal with physicians and patients.

**Table (28): Native language vs. the importance of H.E. skills**

Dimensions	Ranks				Mann-Whitney U	Asymp. Sig. (two-tailed)
	Native Language	N	Mean Rank	Sum of Ranks		
Measure the importance of H.E. skills	Arabic	242	249.61	60404.50	31001.5	.254
	English & other	272	264.52	71950.50		
	Total	514				

In addition, the following table (29) shows that there are no statistically significant differences in the responses of the study participants regarding nurses' confidence levels in terms of all of the health education skills as a group. According to the native language variable, this might be attributed to the convergence of cognitive levels of the study sample, or it might be attributed to their high levels of confidence regarding possessing the necessary skills that enable them to deal with patients, which can be explained from the fact that the practices of hospital nurses impose some challenges that require exceptional skills that health education can provide them with.

**Table (29): Native language vs. confidence in H.E. skills**

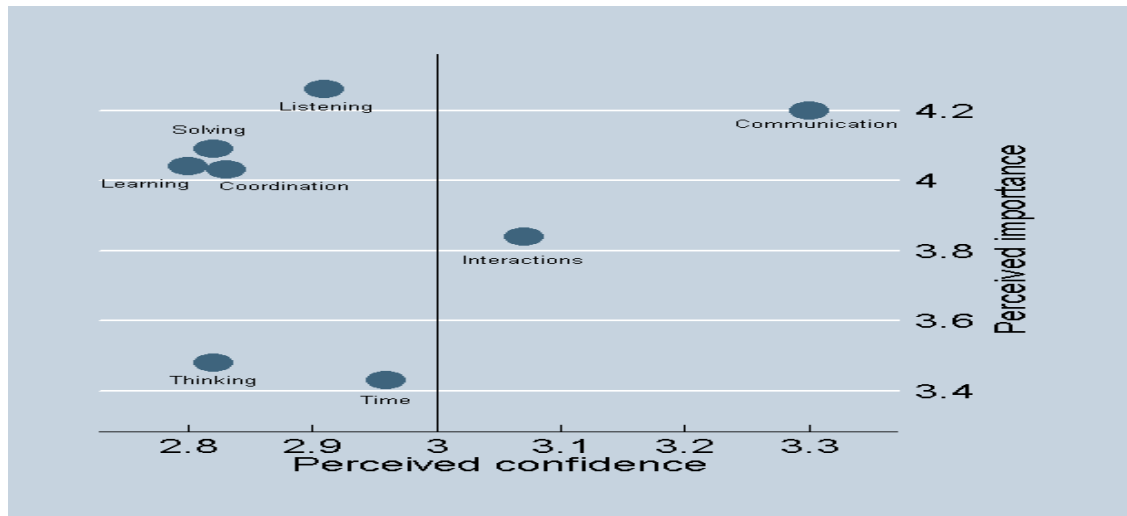
Dimensions	Ranks				Mann–Whitney U	Asymp. Sig. (2-tailed)
	Native Language	N	Mean Rank	Sum of Ranks		
Measure confidence in H.E. skills	Arabic	242	264.49	64007.50	31219.5	.312
	English & other	272	251.28	68347.50		
	Total	514				

Therefore, the results thus demonstrate that there are two categories of competence levels. The first skills which are perceived as very important by the nurses are: active listening, problem-solving, coordination, Social interactions & Perceptiveness and appropriate selection of learning strategies, all of which, according to the results, appear to show that the nurses have a low level of confidence in their ability to perform these skills. Hence, training in those skills is a top priority.

The second category is skills which are perceived as important; these are time management and critical thinking, and both of these show that the nurses have an acceptable level of confidence in their abilities in them. That means training in those skills is not a priority. The third category is a skill which is judged by the participants to be very important, with good confidence levels amongst the majority of participants; this is the skill of communication. Also training in these skills is not a priority. Figure 4 summarises these results and summarise the relation between the importance of skills compared with the confidence levels expressed by the nurses.



**Figure 4 Summary of the importance of skills compared with the confidence levels expressed by the nurses.**



### 6.3.2 Important subjects of health education knowledge

The third question/objective of this study is to identify which item of knowledge, most important and needed to be able to offer health education, is most valued by nurses?. Seven subjects of knowledge in health education were measured. Those include: knowledge of education/teaching/instruction; English & Arabic language; knowledge of mean of communications; basic knowledge of human psychology; counselling; administration & management; and basic knowledge of sociology & culture. The quantitative findings indicate that almost all the measured subjects are ranked as important. The findings indicated that there is no statistically significant difference between Saudi and expatriate nurses regarding the importance of subjects of knowledge for health education practice expects for two subjects. Table (31) summarises statistical significant differences between both groups.

The first subject of knowledge that was tested was **Knowledge of the English and Arabic languages**, which is perceived by the majority of the participants as highly or extremely important, with a mean of 4.30. This skill refers to knowledge of the content of English and Arabic, including the meaning and spelling of words, rules of composition and grammar (see Table 30 for a ranking made by the nurses).

**Table 30 showing the level of importance placed by nurses on the knowledge needed for health education**

Ranking of knowledge by nurses	Extremely important	Highly important	Moderately important	Slightly important	Mean
Education/Instruction/Teaching	26.7%	49.4%	16%	1.6%	M=4.12
English and Arabic languages	35.9%	45.2%	13.3%	5.7%	M=4.30
Means of communications	30.3%	51.6%	14.1%	3.5%	M=4.44
Human psychology	30.7%	48.4	17.7%	3.1%	M=4.07
Counselling	27.8%	52.5%	16.9%	1.9%	M=4.05
Administration and management	23.8%	32.2%	28.3%	13.2%	M=4.33
Sociology and culture	33.7%	45.3%	17.7%	2.9%	M=4.09

On the other hand, the findings indicate that there is no statistically significant difference between Saudi and expatriate nurses regarding the perceived importance of knowledge of English and Arabic languages for health education practice. This is indicated by the reported p value ( $p=0.271$ ), which is greater than 0.05, as shown in table (31). This indicates that the level of need for Arabic and English training courses for both Saudi and expatriate nurses is similar.

**Table (31). Summary of statistical significant differences between Saudi and expatriate nurses regarding importance of each subject knowledge of health education**

Perceived importance of subjects of knowledge	Mann–Whitney U	Asymp. Sig. (two-tailed)	Summary of statistical significant differences between groups	Mean scores between groups	
				Arabic	English or other
Perceived Importance of Knowledge to Education/ Teaching/ Instruction	27081.000	0.000	There is a statistically significant difference	Arabic	3.74
				English or other	4.46
Perceived Importance of				Arabic	4.52

Knowledge to English & Arabic Language	30964.500	0.271	No statically significant difference	English or other	4.11
Perceived Importance of Knowledge to Communications	28098.500	0.003	There is a statistically significant difference	Arabic	4.73
				English or other	4.20
Perceived Importance of Knowledge to Human Psychology	31479.000	0.440	No statistically significant difference	Arabic	4.02
				English or other	4.11
Perceived Importance of Knowledge to Counselling	31750.000	0.545	No statistically significant difference	Arabic	4.01
				English or other	4.09
Perceived Importance of Knowledge to Administration & Management	27146.000	0.001	There is a statistically significant difference	Arabic	4.18
				English or other	3.47
Perceived Importance of Knowledge to Sociology & Culture	29928.000	0.519	No statistically significant difference	Arabic	4.00
				English or other	4.17

Another important subject of knowledge is **Basic knowledge of sociology and culture**. This is defined as basic knowledge of group behaviour and dynamics, societal trends, ethnicity, health beliefs and cultural norms that affect health education (see Table 29). This subject is ranked as important by the majority of nurses, and the mean score (M=4.09) indicates that knowledge of these factors is highly important for the practice of health education. In addition, the p value (p=0.519) reflects that there is no statistically significant difference between both groups (Saudi and expatriate nurses) regarding the importance of a basic knowledge of sociology and culture. As culture is

an essential aspect of life in Saudi Arabia, it would be expected that all Saudi and expatriate nurses agree on this subject for the practice of health education.

**Knowledge about the means of communication** is also believed to be important. It refers to knowledge of communication techniques, methods and ways to inform patients via written, oral and visual media that can influence health education. Almost half of the participant nurses believe it is "highly important" (see Table 30 for results). The mean ( $M=4.44$ ) indicates that it is a highly important subject for health education practice. There is, however, a statistically significant difference between Saudi and expatriate nurses regarding the mean of communication, as represented by the p value ( $p=0.003$ ) (see table 31). This findings reflects the notion that the expatriate nurses perceive communication as being more important than the Saudi nurses. This may due to their need to understand the types of communication in Saudi culture. Hence, more communicational training courses could be provided to the expatriate nurses, as is recommended by them.

**Knowledge of education/instruction/teaching** was also found to be important. This refers to knowledge of the principles and methods for teaching and instructing patients and measuring the effects of education. The result shows that the majority of participants believed it is "highly important" (see Table 30). Thus the mean ( $M=4.12$ ) for the importance of education/instruction is highly important. In addition, similarly to the mean of communication, the findings indicate that there is a statistically significant difference between Saudi and expatriate nurses regarding the perceived importance of knowledge of education/instruction/teaching. As shown in table (31), the p value ( $p=0.000$ ) is smaller than 0.05. Hence, there is difference between both groups. These findings reflect the notion that expatriate nurses ranked this subject more highly. Therefore, this subject needs to receive a greater focus with expatriate nurses.

**Knowledge about administration and management** is also perceived as important. This refers to knowledge of the management principles involved in health education planning, health education resource allocation and the coordination of people and resources. Almost one third of participants believe that knowledge about administration and management is "highly important", while over 20 per cent consider it is "extremely important" (see Table 30). The mean ( $M=4.33$ ) indicates that knowledge about administration and management is a highly important subject. This

subject has shown another statistically significant difference between Saudi and expatriate nurses, and the p value ( $p=0.001$ ) indicates this statistically significant difference, as shown in table (31). This is due to the majority of Saudi nurses compared with expatriate nurses selecting higher rates in terms of knowledge of this subject. Hence, Saudi nurses could provide more administrative training courses, especially as these Saudis nurses often have administrative positions.

The perceived possibility of acquiring **Basic knowledge about human psychology** was also measured. This refers to knowledge of human behaviour and performance, learning and motivation and individual differences in ability that affect health education. The majority of participants believe it is "highly important", and another third consider it is "extremely important" (see Table 30). Generally, the mean ( $M=4.07$ ) indicates that it is highly important. On the other hand, the findings show no statistically significant differences between Saudi and expatriate nurses regarding the perceived importance of a basic knowledge of human psychology ( $p=0.440$ , which is  $>0.05$ ). This might be related to the same patient mental health conditions often being faced by hospital nurses, which makes them aware of the importance of this subject. Hence, both groups agree on its importance (see Table 31).

**Counselling** as a subject of knowledge is also important for nurses. Counselling refers to knowledge of the principles, methods and procedures of rehabilitation and counselling and guidance of patient and family. There was a positive response to this need (see Table 30). Hence, the mean ( $M=4.05$ ) indicates that it is highly important. Also, as shown in table (31), the P value ( $P=0.545$ )  $>$  ( $0.05$ ) indicating no statistically significant difference between both groups about importance of counselling. Therefore, the previous finding that mean of communication, Knowledge of education/instruction/teaching, and Knowledge about administration and management has statistically significant differences between groups of nurses.

However, as groups of subjects of knowledge, and as shown in the following table (32), there are no statistically significant differences in the responses of the study sample regarding the importance of the groups of H.E. subjects of knowledge in relation to the variable of native language. This might be attributed to Saudi or non-Saudi nurses' convictions of the importance of continued learning in their field of specialisation in general and in the field of health education in particular, due to

ongoing cognitive development. This is shown in the following section regarding findings from the qualitative data.

**Table (32) Native language vs. the importance of H.E. subjects of knowledge**

Ranks					Mann–Whitney U	Asymp. Sig. (two-tailed)
Dimensions	Native Language	N	Mean Rank	Sum of Ranks		
Measure of the importance of H.E. subjects of knowledge	Arabic	242	253.23	61280.50	31877.5	.536
	English & Other	272	261.30	71074.50		
	Total	514				

### 6.3.2. Qualitative data findings about education-related objectives

The qualitative data stem from open-ended questions, including: What are the skills that are most needed to provide health education? and What are the subjects of knowledge most needed to provide health education? The qualitative data findings provide two themes that could explain why, in this study, the previous quantitative data found that the majority of measured knowledge and skills were important and needed for health education. Those include: required learning needs and education-related problems of health education. The appendix 5 (p. 274) summarises the qualitative analysis of the main themes and their subcategories. The required learning needs include general comprehensive and some specific subjects of knowledge and skills in health education. The education-related problems of health education include language inconsistencies in nurses' education in health education, inadequate training being provided and lack of training. While the learning needs might be an expected factor, the role of language inconsistencies in nursing education was unexpected.

#### 6.3.2.1. *Theme 1 – Learning needs of health education*

The most noticeable factor within the qualitative data findings is the type of learning nurses require to deliver hospital-based health education. The findings indicate that nurses are in need of two types of learning needs, which include: Comprehensive subjects, such as the knowledge and skills for health education practice, and the other type is the need for specific subjects and skills for health education.

#### **6.3.2.1.1. General comprehensive education in health education**

The comprehensive learning needs mean general systematic education/ training that covers many subjects and skills related to health education, and this training/ education this has to be based on several tools and strategies for systematic education/ training in health education. This factor was mentioned by five participants, including two nurse supervisors, two nurse instructors and one staff nurse, who all believe that nurses need more lectures, courses and continuous medical education about health education to ensure that nurses get the knowledge they need to engage in optimal practice in health education. A supervisor (5/FL/S/M/ED) stated that, *“Nurses need to read everything new about health education, publications and the most important continuous medical education, as it should present everything new about health education. The required skills are varied, and sometimes based on the patient’s condition, for example nurses may be required to learn how to decrease their level to the patient’s literacy level to ensure that the information provided is understood.”* hence, it is possible as well as direct knowledge, nurses need practical skills for learning in order to provide health education by using the on ongoing basis, learn independently and keep up to date.

Also another participant (16/FL/NS/M/sup) stated: *“They have to be educated about medicine, diet and everything, they need lectures, a staff development programme, things like that we have to provide. The knowledge they should get is the importance of health education ... we have to have more information about that one (health education), then they will know and they will provide it.”* Hence, this finding suggests that health education requires a wide range of knowledge and skills. This result also could be an indirect validation of the following quantitative results, and this can explain why the majority of knowledge and skills measured by survey of this study are perceived to be highly important because, simply, they need them.

#### **6.3.2.1.2. The need for specific knowledge of and skills in health education**

The other type of learning need is the need for specific subjects for education. The findings also indicate a need for specific learning subjects to improve of daily practice of health education, and the most reported specific learning need is knowledge of Arabic and English from language-training courses, which was previously mentioned in the qualitative data findings. This subject was demanded and linked to the language barrier that affects both Saudi and expatriate nurses; especially the next section, about

barriers to health, will clearly indicate that language is a real daily challenge for nurses. The need for Arabic and English language training courses was mentioned by six participants, including staff, managers, Saudi and expatriate nurses. A nurse (9/FL/S/ST/NW) stated, *“It’s good to provide expatriate nurses with Arabic training courses, but also Saudi nurses require more training courses in English”*. Also, a participant (6/ml/ns/m/ins) stated, *“Here, as a nurse, you should be somehow be good at speaking in Arabic and English because not all patients are Saudi patients.”*

The findings also identified some other additional specific learning needs, such as teaching/ instructing, management, and knowledge of social and cultural values, which was previously mentioned in the quantitative data findings. A clinical instructor (14/fl/ns/m) for example, said, *“social education has to be included in their studies ... also patient teaching should be included in future nursing education because nurses have to do health education”*. And someone (17/fl/M/IC) talking about health education said, *“There should be a continuous education programme, including management, that covers everything.”* It may not be appropriate to conclude directly that these subjects of knowledge and skills (teaching/ instructing, management, social and cultural values) are shared themes as each one of these subjects was mentioned by only one participant, except for teaching/ instructing which was mentioned by two participants; but in consideration of the previous findings which indicated that nurses are in need of comprehensive education in health education, it could be possible; and in consideration of these previous subjects also being identified by quantitative data findings as important skills, it is possible to say that it is part of the learning needs demanded for health education. This comprehensive education in health education is, however, not the only challenge to hospital nurses; the following factor, which is about the quality of health-education training or continuous medical education, may also play a role in explaining the previous quantitative results.

### **6.3.2.2. Theme 2.educational related problems**

#### *6.3.2.2.1. Role of language inconsistency in nursing education*

The findings indicate that there is a low level of confidence due to the language inconsistency between nurses as learners and their instructors during their nursing education. This finding relates more to Saudi nurses than to expatriate nurses, which is



originally due to the language barrier, as was previously mentioned in the quantitative data findings. This factor was only mentioned by nurse managers.

This is because, in Saudi Arabia and unlike Saudi hospitals, all public schools education is conducted only in Arabic with very limited courses in English starting in elementary school until the end of high school. The public media often report inadequate and ineffective English education in Saudi public schools. Even some nursing schools and colleges are teaching nursing in Arabic. Hence, a Saudi nursing student who studies and graduates as a nurse suffers from receiving nursing education in English, as the official language in Saudi hospitals, especially nursing education in hospitals, is often determined by non-Arabic speakers, i.e. expatriate nurse instructors. This means that when nurses graduate they are sometimes ill-equipped to speak in English, which is the language of hospital practice.

As a result, this decreases students' and new staff nurses' ability to receive education from one side, and affects the ability of nurse instructors to educate student nurses, thus making it more difficult for the instructors to evaluate nurses' skill in giving health education. As result, it affects the outcomes of the education/training provided for nurses and affects their confident levels in their ability to teach. This means that this problem relates more to Saudi nurses than to expatriates nurses.

Four nurse managers validated this issue. A clinical instructor (10/FL/NS/M/TNSI) stated that, *"It's difficult to do education if there is language hindrance, even if I teach, they cannot comprehend ... this affects their skills in performing basic health education tasks, such as assessment."* Another instructor (15/FL/NS/M/PHI) stated, *"if I speak in English and staff are Saudi nurses speaking Arabic, what is the use? If I do not understand, I will not follow what is being taught to me"*. Another supervisor (11/ML/NS/M) stated, *"If I cannot evaluate what the staff nurses are telling the patient I cannot evaluate them."* Another supervisor (6/ml/ns/m/ins) said, *"I saw Saudi nurses providing health education but I cannot validate if it's correct and adequate or not because they speak in Arabic."* Therefore, this language inconsistency in nursing education is a real factor that affects learning, nurses' performance and the evaluation of health education provided; and hence, nursing education has to ensure that such factors are well managed for better practice in health education. This will be examined in detail in the discussion chapter.

#### 6.3.2.2.2 *The quality of continuous medical education in health education (post registration)*

Another factor affecting the health education given by hospital nurses is the quality of continuous nursing training/ education in health education on post-registration nurse education programmes. In addition, the previous quantitative data findings indicated the lack of patient education in clinical nursing programmes.

The findings reflect a gap between staff nurses and nurses managers over the quality of continues nursing education of health education. The nurse managers believe there is good training in health education as part of staff development program, as mentioned by three participants. The supervisor (16/FL/NS/M/SUP) stated that *"we have good health education training"*. This claim was supported by one staff nurse (7/FL/S/ST) who said *"There is good support in training."*

On the other hand, opposing the nurse mangers' positive perception, the findings indicate that the staff nurses have negative perceptions over the quality of the provided education. The majority of the participants believe the opposite and reported ineffective and insufficient specialized nursing training in health education once student nurses have been appointed to a post. This is reported by majority of participants staff nurses (four out of six) and two nurse managers, especially by Saudi staff nurses who believe it to be a factor affecting their performance and confidence in their practice. A supervisor (5/FL/S/M/ED) stated, *"There is no specialized training in health education"*. Another staff nurse (8/FL/S/ST/NW) confirmed that, saying *"absolutely no training, and even the last provided training was ineffective"*. Another staff nurse (9/FL/S/ST/NW) stated, *"The orientation phase, which is the most important period for nurse training, was just explanation, no chances to do thing practically and health education was omitted, which affects us now."* Therefore, the quality or the adequacy of continuous education in health education is not clearly based on this gap; but what is clear is that staff nurses are dissatisfied with the continuous medical education in education provided. The theory-gap problem in nurses' education is considered in the discussion chapter.

Therefore, the summary of findings about the education-related objective has two main components. First, nurses are in need of comprehensive training, this has to include many health-education skills, including: communication, active listening, problem-solving, coordination, social interaction and perceptiveness, the appropriate selection of learning strategies, time management and critical thinking. Also, nurses are required to learn several subjects of knowledge, including: knowledge of English and Arabic, basic knowledge of sociology and culture, knowledge about means of communication, knowledge of education/ instruction/ teaching, basic knowledge about administration and management, basic knowledge about human psychology and counselling.

In addition, comparing the survey findings with the interview findings, especially about the quality of health-education training, it indicates that there is clear a gap between nurse managers and staff satisfaction concerning the quality of the education provided. That actually refers to the poor management of nurses' education/ training in health education in Saudi hospitals; especially the following section is about how barriers to health education validate the presence of several administration-related problems that affect the management of nursing training in health education.

#### **6.4 Section 3. Barriers to health education**

This section is about the barriers to health education. The fourth objective of this study is to identify any organisational barriers that might impact on the delivery of health education in hospitals. From the quantitative data findings, the main themes include nurses and workplace-related barriers. From the qualitative data findings, the main themes include: the nature of nursing work-related barriers, nurse-related barriers, patient-related barriers and administration-related barriers. The following table (Table 33) summarises the main themes and subcategories of both the qualitative and quantitative data findings about the barriers to health education.

**Table (33) Summary of the findings about barriers to health education.**

Themes of qualitative data findings	Subcategory	Themes of quantitative data findings	Subcategory
Nurse-related barriers	1- Lack of interest in learning or providing health education	Nurse-related barriers	1- Lack of acceptance of nursing in the community, 2- Lack of a common language

	2-Nurses' personal problems		and culture of communication 3- Lack of knowledge about methods to educate patients,
Nature of nursing work-related barriers	Major barriers: 1- Shortages of staff 2- Lack of time, 3- Workload,	Work-related barriers	<u>Severe barriers include:</u> 1- Lack of a good educational environment, 2- Lack of teaching tools for patient education, 3- Insufficient time for education, 4- Lack of patient education in clinical nursing programmes. <u>Moderate barriers include:</u>
Patient-related barriers	1- Patient's health condition, and 2- Patient's cooperation with or refusal of education		
Hospital administration-related problems	1- Inadequate management of continuous education/ training in health education. 2- Inadequate management of workplace-related problems.		1- Job satisfaction, and 2- The existence of anxiety and pain in a patient.

#### 6.4.1. Quantitative data findings about barriers to health education

The fourth objective of this study is to identify any organisational barriers that might impact on the delivery of health education in hospitals. The study measures whether the 14 factors disclosed are barriers to health education practice. Those include: lack of knowledge about new patient education methods; lack of patient education in clinical nursing programs; job dissatisfaction; nursing acceptance in community; salary insufficient; frequent shift rotation; lack of teaching tools of patient education; lack of new scientific sources of patient education; lack good educational environment in hospital; lack of common language and culture of communication with patient; lack of tendency in patient for learning; insufficient time for hospitalization for learning; existence of anxiety and pain in patient; existence of shame of patient in learning. The findings indicate that most of the measured factors perceived to be moderate or severe are barriers to the practice of health education. In addition, the findings indicate the presence of several statistically significant differences between Saudi and expatriate

nurses regarding some of the measured variables. These factors are put into two categories: possible work-related barriers and possible nurse-related barriers. The following table (34) summarises the existence or absence of statistically significant differences between the groups regarding each measured barrier to health education.

**Table (34). Existence or absence of significant differences between nurses' groups regarding each barrier to health education.**

Level of confidence	Mann–Whitney U	Asymp. Sig. (two-tailed)	Summary of significant differences between groups	Mean scores between groups	
				Arabic	English or other
Lack of knowledge about new patient education methods	31629.500	0.519	No statistically significant difference	Arabic	3.27
				English or other	3.23
Lack of patient education in clinical nursing programs	30235.500	0.130	No statistically significant difference	Arabic	3.85
				English or other	3.36
Job dissatisfaction	27676.000	0.002	There is a statistically significant difference	Arabic	3.64
				English or other	3.37
Nursing acceptance in the community	31172.500	0.355	No statistically significant difference	Arabic	4.76
				English or other	4.04
Insufficient salary	24945.000	0.000	There is a statistically significant difference	Arabic	3.69
				English or other	3.51
Lack of teaching tools in terms of patient education	31808.500	0.592	No statistically significant difference	Arabic	3.58
				English or other	4.48
Frequent shift rotations	25803.000	0.000	There is a statistically significant difference	Arabic	4.65
				English or other	3.59
Lack of new	29332.500	0.042	There is a statistically	Arabic	4.08

scientific sources of patient education			significant difference	English or other	3.91
Lack of a good educational environment in the hospital	25919.500	0.000	There is a statistically significant difference	Arabic	3.99
				English or other	3.66
Lack of common language & culture of communication with patients	28588.500	0.10	No statistically significant difference	Arabic	3.89
				English or other	4.14
Lack of tendency in patients for learning	26988.000	0.000	There is a statistically significant difference	Arabic	4.06
				English or other	4.01
Insufficient time of hospitalisation for learning	23586.000	0.000	There is a statistically significant difference	Arabic	4.23
				English or other	3.51
Existence of anxiety and pain in the patient	30641.000	0.232	No statistically significant difference	Arabic	2.92
				English or other	3.94
Existence of shame of the patient in terms of learning	26110.500	0.000	There is a statistically significant difference	Arabic	3.74
				English or other	3.73

### 6.3.3.1 Workplace related barriers

Workplace-related barriers, based on severity criteria, are categorised into three categories: severe, moderate, no barrier.

#### 6.3.3.1.1. Severe barriers

The findings show that three factors from the measured possible barriers can truly be classified as severe barriers. Those include: lack of a good educational environment, the lack of teaching tools for patient education and insufficient time for education. The

majority of nurses ranked lack of a good educational environment as severe or total barrier, and other participants ranked it as moderate or slight barrier. These results give the lack of a good educational environment a mean of  $M=3.81$ , which indicates that this factor is almost a severe barrier, see Table 33. In addition, there is a statistically significant difference between Saudi and expatriate nurses regarding these barriers. The  $p$  value of 0.000 validates the presence of this statistically significant difference, which was mainly selected by Saudi nurses, the mean score for Saudis was 3.99 while it was 3.66 for the expatriate nurses (see table 34). This could indicate that Saudi nurses are most affected by this barrier. This means that this barrier significantly affects the nurses' performance of health education, and immediate actions against it are required, such as providing a better educational environment. The discussion chapter will present all of the results and the actions to remedy them in detail.

**Table 35 showing Factors that are severe barriers to patient health education and nurses' ranking of severity**

Factor with ranking by nurses	Total barrier	Severe barrier	Moderate barrier	Slight barrier	No barrier	Mean
Lack of a good educational environment	27%	39.7%	23.5%	6.8%	2.9%	$M=3.81$
Lack of teaching tools	21.2%	31.9%	31.3%	10.3%	4.9%	$M=3.97$
Insufficient time for education	20.6%	40.5%	26.5%	9.1%	3.1%	$M=3.66$

In addition, the lack of teaching tools for patient education is another a major barrier related to workplace. This is shown by more than half of the participants ranking it as a severe barrier (see Table 35 for results). Therefore, the mean ( $M=3.97$ ) indicates that this is a severe barrier to education. For this barrier, as shown in table (34), there is no statistically significant difference between both groups of nurses. The  $p$  value is 0.592, which is larger than 0.05 as the mean score for Saudi nurses is 3.58, and 4.48 for the expatriate or non Arabic speaking nurses. Therefore, from both this result and the previous result that indicated a lack of a good educational environment, it can be concluded that there are educational resources problems that strongly affect nurses' performance in health education.

Moreover, insufficient time for education is third major workplace related barrier to patient health education. The majority of the participants ranked it as a "severe barrier" (see Table 35 for results). The mean (M=3.66) reflects that this factor falls between a moderate and a severe barrier. Similarly to the lack of a good educational environment, the insufficient time for education shows another statistically significant difference between Saudi and expatriate nurses, as indicated by the p value (p=0.000), which is smaller than 0.05, as shown in table (34). The mean score for Saudi nurses is 4.23, while it is 3.51 for the expatriate nurses. The Saudi nurses believe that insufficient time is a more challenging factors to them than the expatriate nurses, which may due to the need for better time management skills, as previously reported.

### **6.3.3.1.2 Moderate barriers**

Two factors are classified as moderate barriers include: job satisfaction and the existence of anxiety and pain in a patient. Job satisfaction is defined as "the favorableness or unfavorableness with which employees view their work" (Grieshaber et al., 1995 as cited in Castle, 2006, p. 1). For job satisfaction, the majority of participants ranked it a "severe barrier" (see Table 34) for results. The mean score (M=3.49) indicates that this barrier as moderate barrier. For this factor, there is another statistically significant difference between both groups of nurses, as indicated by the p value of 0.002, which is less than 0.05. The mean score for the Saudi nurses is 3.64, and 3.37 for the expatriate nurses. This factor, however, could reflect another example of Saudi nurses' dissatisfaction regarding the management of hospitals, as it is mostly reported by Saudi nurses. This result, in consideration of the previous findings about the poor management of nursing education and factors related to insufficient time, may indicate poor administration and management in nursing, which as a result affects nursing performance in health education. Also, for this barrier, no immediate action is required, but a future action plan is required to remove or decrease it.

**Table 36 showing Two factors that are considered moderate barriers to patient health education and nurses' ranking of severity**

<b>Factor with ranking by nurses</b>	<b>Total barrier</b>	<b>Severe barrier</b>	<b>Moderate barrier</b>	<b>Slight barrier</b>	<b>No barrier</b>	<b>Mean</b>
Job satisfaction	21.2%	34.8%	24.9%	9.9%	9.1%	M=3.49
Anxiety and pain in a patient	16.2%	36.3%	31.2%	11.3%	5.1%	M=3.47



On the other hand, the existence of patients' anxiety and pain is a moderate barrier and demonstrates similar findings to job satisfaction (see Table 36 for results). The mean for anxiety and pain in patients is (M=3.47), which indicates that it is a moderate barrier. For this barrier, the mean score for the Saudi nurses is 2.92, while it was 3.94. There is no statistically significant difference between both groups ( $p=0.232$ , which is  $>0.05$ ) (see table 34). This indicates that patient-related factors have an impact and it plays a role in the daily practice of health education. Also, for both reported moderately barriers,

### 6.3.3.1.3 Factors are a slight barriers

Three factors appear has mean score lower than 3.50, which put them as slight barriers of health education. Those include: a lack of willingness from patients to learn, frequent shift rotation and lack of scientific sources for learning by patients. For a lack of willingness of patients to learn, the majority of nurses rank it as moderate barrier, and the mean (M=3.33) puts it as a slight barrier. One other hand, for frequent shift rotation, the majority of participants rank it as a "moderate barrier", but the mean (M=2.91) indicates that this factor is also a slight barrier. Lastly, the lack of scientific sources for patient learning has the mean (M=2.96). This also indicates a slight barriers to patients' health education (see Table 37). The p value of 0.042 indicating the presence of statistically significant difference between Saudi and expatriate nurses about this factor. The mean score for Saudi nurses is 4.08, and 3.91 for the expatriate nurses.

**Table 37 showing Three factors that are moderate barriers to patient health education and nurses' ranking of severity**

Factor with ranking by nurses	Total barrier	Severe barrier	Moderate barrier	Slight barrier	No barrier	Mean
Lack of willingness from patients to learn	4.9%	9%	44.2%	34.8%	10.7%	M=3.33
Frequent shift rotation of nurses	1.8%	5.8%	35.6%	35.6%	19.5%	M=2.91
Lack of scientific sources for patient learning	3.5%	10.9%	39.5%	32.3 %	13.4%	M=2.96

### 6.3.3.2 Nurse's related barriers

Nurse's related barriers are barriers caused by or related to nurses, rather than the environment. They also fall into groups: severe, moderate or slight barriers to nurses giving patient education. The factors identified as severe barriers are: lack of acceptance of nursing in the community, lack of patient education in clinical nursing programmes, lack of a common language and culture of communication. One factor can be classified as a moderate barrier, which is lack of knowledge about methods to educate patients, and only insufficient salary reported as a slight barrier.

#### 6.3.3.2.1 Sever barriers

The lack of patient education in clinical nursing programmes is one of the severe barriers. Almost half of the participants perceive that the lack of patient education in clinical nursing programmes is a "severe barrier", and even more perceive it as a total barrier (see Table 36 for results). This indicates that the mean for lack of patient education in clinical nursing programmes is  $M=3.59$ , and this makes this factor as a severe barrier. In addition, as shown in table (34), the p value of the Mann–Whitney U test is 0.130 (which is  $>0.05$ ). The mean score for Saudi nurses 3.85, and it is 3.36 for the expatriate nurses, meaning that there is no statistically significant difference between Saudi and expatriate nurses regarding this barrier.

**Table 38** showing Factors that are severe barriers, due to nurse situations, to patient-health education and nurses' ranking of severity

Factor with ranking by nurses	Total barrier	Severe barrier	Moderate barrier	Slight barrier	No barrier	Mean
Lack of patient education in clinical nursing programmes	15.8%	36.8%	25.1%	16.3%	5.8%	$M=3.59$
Lack of a common language and culture of communication	29.6%	38.5%	21.8%	5.8%	4.1%	$M=4.02$
Nursing acceptance in the community	14.2	33.7%	24.9%	15.2%	10.9%	$M=4.37$

Also, the lack of a common language and culture of communication with the patient is another severe barrier. The number of participants who class it as a severe or total barrier is over half (see Table 38). Therefore, the mean ( $M=4.02$ ) indicates that the lack of a common language and culture is a severe barrier. In addition, there is no statistically significant difference between the Saudi and expatriate nurses regarding

this barrier, as the p value is 0.10, which is  $>0.05$ . The mean score for the Saudi nurses is 3.89, and 4.14 for the expatriate nurses. This means that both groups of nurses may share the same level of hindrance from a common language and culture of communication, as Saudi Arabia is a very multicultural society (see Table 34).

The lack of nursing acceptance in the community is another severe barrier which may reflect the feelings and beliefs of Saudi nurses. This because, in Saudi Arabia, some people still look down to nurses due to mixing of male and female, which culturally is not accepted, as reported by the Saudi participants in this study. The findings show a high mean score ( $M=4.37$ ), which ranks this barrier as a severe barrier (see Table 38 for results). In addition, as shown in table (34), this factor shows no statistically significant difference between both groups of nurses ( $p=0.355$ , which is  $>0.05$ ). The mean score for the expatriate nurses is 4.04, while it was 4.76 for the Saudi nurses. This may mean that expatriate nurses are aware of Saudi cultural challenges, as is shown in the qualitative findings. This researcher is from the same culture and thus aware that at the core of this strong cultural barrier are gender segregation roles, as will be seen in the following section. This is a severe barrier and requires immediate action to counter it. There are several possible solutions and strategies that can decrease the impact of this strong cultural barrier. Those are discussed in detail in the discussion chapter

#### **6.3.3.2.2 Moderate barriers**

A factor classified as a moderate barrier is the lack of knowledge about patient education methods (see table 39). The mean ( $M=3.25$ ) indicates that this factor has moderate impact as a barrier. In addition, there is no statistically significant difference between Saudi and expatriate nurses, as indicated by the p value of 0.519, which is greater than 0.05, and the mean score for Saudi nurses (3.27) and mean score for the expatriate nurses (3.23). The action against this barrier depends on the nature of the source, it could be linked to the previous findings about poor management in nursing training and education in health education, or could be related to other issues, as explained in the discussion chapter. Lastly, only an insufficient salary seems not to be a barrier (see Table 37 for results). This shows that an insufficient salary has a mean of  $M=2.23$ , but this factor is ranked as a slight barrier.

**Table 39** showing moderate and slight barriers

<b>Factor with ranking by nurses</b>	<b>Total barrier</b>	<b>Severe barrier</b>	<b>Moderate barrier</b>	<b>Slight barrier</b>	<b>No barrier</b>	<b>Mean</b>
Lack of knowledge about patient education methods	12.5%	31.1%	31.3%	18.9%	6.2%	M=3.25
Insufficient salary	2.3%	5%	24.1%	38.5%	32.3%	M=2.23

Therefore, to sum up this section, the work-related barriers, the factors are put into three categories: severe, moderate, and slight. Three factors which can be classified as severe barriers are: i) lack of a good educational environment, ii) insufficient time for education and iii) a lack of teaching tools of for education. Factors classified as moderate barriers are: i) job satisfaction and ii) the existence of anxiety and pain in the patient. On the other hand, the major nursing related barriers include: lack of acceptance of nursing in the community, lack of patient education in clinical nursing programmes, lack of a common language and culture of communication, and lack of knowledge about methods to educate patients can be classified as a moderate barrier. This simply indicates that health education is affected one way or another by different levels of workplace barriers.

In addition, as a groups of barriers and due to the presence of several individual statistically significant differences in the previously presented findings, it is obvious from the following table (40) and the results from the tables mentioned above that there are statistically significant differences in the responses of the study sample regarding barriers to H.E. in relation to the types of nurses (Saudi or expatriate nurses), and most of the previously reported statistically significant differences in these barriers were reflected by Saudi nurses. This might be attributed to the fact that Saudi nurses are closer to the local environments and understand the different obstacles that exist within it, which makes them aware of the different factors that hinder the development of effective H.E.

**Table (40). Native language vs. possible barriers of H.E. skills**

Dimensions	Ranks				Mann–Whitney U	Asymp. Sig. (two-tailed)
	Native Language	N	Mean Rank	Sum of Ranks		
Measure of possible barriers to H.E.	Arabic	242	282.27	68309.00	26918.0	0.000
	Other	272	235.46	64046.00		
	Total	514				

### 6.4.2. Qualitative data findings about barriers to health education

To elicit qualitative data, the researcher used open-ended questions about the barriers that affect the provision of effective health education. Using the qualitative analysis process in the methodology chapter (page 107), the study identified three main themes that reflect the findings of the qualitative data regarding the barriers to health education. These can be categorised as: nursing work-related barriers, administration-related barriers and nurse-related barriers. The appendix 6 (page 279) summarises the qualitative data analysis findings for the main themes and their subcategories. The nature of nursing work-related barriers might be expected, based on the literature review, though the role of hospital administration as a barrier was unexpected as it is supposed to be a prop of health education.

#### 6.4.2.1. *Theme 1. The nature of nursing work-related barrier*

The findings indicate that there are three key barriers related to nursing work, and those interact with each other. They include: lack of time, shortages of staff, pressure of workload. The insufficient time for education was also previously mentioned in the quantitative data findings.

Staff shortages were mentioned by seven participants, lack of time by nine, and four interviewees reported pressure of workload. Workload for example is primarily related to shortages of staff and affects the amount of time available to educate patients. The participant (5/FL/S/M/ED), for example, reported that, “*due to work pressure, the basic element of health education is missing, but we try our best to achieve optimal*

*education. This makes the available time to provide education is five minutes, but it's not enough."*

In addition, the insufficient time was linked with shortage of staff as a barrier to health education. Meaning the shortage of staff enforce hospital nurses to focus on the basic of nursing care and ignore health education due to lack of time. The participant (6/ml/ns/m/inst) stated, *"One of the factors is shortage of nurses, what is happening is that nurses in most of time are pre equipped by their work. Also, the participant (18/fl/NS/M/HN) stated, "because of the shortage of nurses, we do not have time to give health education, because the nurse-patient ratio should be 1:2 but sometimes we are handling 1:3 or 1:4, the priority is to give time to nursing management, after that we will give some time to patient education".* Hence, a shortage of nurses increases th workload, and a workload increase reduces the time to provide health education. Therefore, insufficient time is linked with complex working conditions and indicates that any suggested solutions have to target these factors.

#### **6.4.2.2. Nurse-related barriers**

##### *6.4.2.2.1. Language/communication related barrier*

Another type of barrier identified by this study is nurse-related. The findings also indicated the presence of two types of nurse-related barriers that affect hospital nurses in Saudi Arabia. Those include language/ communication-related barriers and psychology-related barriers for individual nurses.

The findings validate the language and communication barrier being the main one affecting health education, especially among expatriate nurses, which was previously mentioned in the quantitative data findings. It is described as a "major", "main" or "big" barrier that affects expatriates nurses in the provision of health education to Saudi patients, as reported by all the expatriate interviewees including one Saudi nurse. An expatriate nurse (11/M/NS/M/IN) stated, *"In my home country, we can express in detail because we speak the native language, we can easily transfer information, no hindrances, no barriers. How can I share my ideas or knowledge with people here if I can't communicate well ... if there is a communication barrier you cannot deliver and express what you want exactly, in detail. I cannot even evaluate what the staff are telling to them, I can describe the health education here as poor."* As a result, the

expatriates are used to seeking help from other healthcare workers to work as interpreters. The head nurse (18FL/NS/M) states that, *"Due to language barrier, most of the time we are asking for help from the social worker"*.

This barrier also affects Saudi nurses as there are many immigrants who do not speak Arabic, and most of them do not even speak English. A Saudi head nurse (5/FL/S/M/ED) stated that, *"The immigrants do not understand Arabic, we cannot provide health education"*. Hence, it appears for some of the expatriate nurses that health education practice is about communication. An interviewee (6/ml/ns/m/inst) stated that, *"Health education practice is always about the language barrier because not all nurses can speak multiple languages."* Also, one interviewee (11/ml/ns/M) stated that, *"The problem is the communication barrier, this is at the core of health education."* Therefore, language is a major barrier to health education, and recommendations must be made to decrease its impact on health education.

#### **6.4.2.2. Psychological-related barriers of individual nurse**

Another type of nurse-related barrier is a psychological one related to individual nurses. This includes: lack of interest in learning or providing health education; and a nurse's personal life satisfaction can affect their performance in health education as well as their general nursing practice. These factors were reported by a majority of the interview participants (10 out of 15). The main psychology-related factors of individual nurses that affect their performance in health education are a lack of interest in learning or providing health education.

Nurses' lack of interest and desire to learn health education are an important factor that can hinder the development of competent health education. Without a personal interest in learning, education in health education may not be cost-effective. One interviewee (10/fl/ns/m/ tns) stated, *"Number one among nurses' barriers is a nurse's readiness to learn, some of our staff do not want to get involved in this type of activity (health education training), it's difficult for us to convene them. If they do not want to participate, what is the use?"* This factor is a real problem because if a nurse has no desire to learn it means he/she may ignore the provision of health education when it is needed. That does happen, as reported by the participants. The findings indicate that some nurses are not even interested in providing education when they have chances to do so. A participant (9/FL/S/ST/NE) stated, *"There are nurses who are not interested*

*in health education, they get many chances to provide education but they do not even intend to do that, not even for patients who are in need of education.”*

The findings point to three factors behind a lack of interest in providing health education. One of those factors is a heavy workload when there is a shortage of staff, this is because nurses are equipped with a nursing care plan and other additional tasks, which make them ignore health education. A participant (13/FL/S/SF) stated, *“We do other tasks not even part of nursing due to inadequate management of nursing, which makes us ignore health education.”* Also, a participant (18FL/NS/M) stated that *“the priority is to give time to nursing management, after that, we will give some time to patient education if we have time.”*

Another reason for the lack of interest in providing education is personal life satisfaction or personal problems. Those affect nurses’ performance in health education as they put nurses in a psychological mood that makes them just want to finish their basic nursing care tasks, with no desire to provide health education which is seen as a secondary task as validated by the following findings. This means that some nurses might not be able to prevent their personal problems affect their regular nursing care, including health education.

This dissatisfied psychological status is related to several sources as reported by the participants. Those include family-related problems, especially among Saudi nurses. The researcher cannot offer deeper explanations for this issue because the researcher cannot ask personal questions. Culturally, people in Saudi Arabia do not like to talk at all about their personal problems, even to their doctors, and most of the participants who mentioned this point were Saudi female nurses who feel sensitive about talking about personal issues with a strange man, such as the researcher in this study. Personal and related problems were only mentioned by Saudi nurses. A participant (5/FL/S/M/ED) stated, *“There are nurses’ personal problems which affect their performance in nursing care, including health education; when a nurse has problems in her house or family he/she is not going to give her best in education.”* Also, a participant (13/FL/S/SF) stated, *“I think the psychological statuses of nurses affect their practice of health education.”*

On the other hand, two expatriate nurses reported that they were dissatisfied with Saudi culture, some cannot cope with it, and that feeling sometimes makes them feel that



they are not interested in working in Saudi Arabia, or even in providing health education. An expatriate nurse manager (18/FL/NS/M/HE) stated, *“We cannot go outside and meet with others freely, especially here in this city, it makes expatriate nurses feel dissatisfied with working here. That has a physiological and psychological impact on expatriate nurses and makes them unwilling to work or to provide education in this country.”* Also, another expatriate (19/FL/NS/ST) asked in anger, *“Why do we have to cover our faces here? We are not Muslims.”* Hence, the culture itself can have a negative psychological effect on nurses. Therefore, a lack of interest in providing health education has to be considered. The planning for an educational programme has to take into account encouraging and educating nurses about the importance of health education, then teach them how to provide health education. This is discussed in the following chapter.

#### **6.4.2.3. Theme 3 Patient-related barriers**

The findings also indicate that patients play an essential role in hindering health education. As reported by nine participants, the study identified two types of patient-related barriers, including: patients' health condition and patient's level of cooperation or refusal of education for reasons other than their health condition. A patient's medical or psychological health status affects hospital nurses when planning or implementing health education. This validates the previous quantitative data findings that reported the existence of anxiety and pain in a patient as being a major barrier. It also affects the level of acceptance of education from a patient's family members due to their concern about the patient's condition. An interviewee (12/M/S/SF) stated, *“Some patients are in a psychological condition not appropriate for education.”* Also, a participant (17/FL/NS/M/HE) stated, *“Some patients are in a denial stage, it is very hard to explain to them because they are in denial.”*

Another patient-related barriers is a patient's refusal of education for non-medical reasons. The findings indicate refusal, non-cooperation and disrespectful responses from some patients towards the education provided by hospital nurses. This refusal is linked to two factors which include a patient's education level or literacy, and another source might be cultural differences. A patient's literacy level influences their acceptance or level of receiving education: the better the education the more easy it is for hospital nurses to communicate with patients. A participant (17/FL/NS/M/HE), for

example, stated, *“Some patients refuse procedures or education, I think that is because of their education.”* Also, a participant (14/FL/NS/M/INS) stated, *“We have some patients who do not cooperate enough, maybe because of their level of understanding of information; they can receive but they cannot comprehend.”*

Another possible source for patient refusal, which is also an unexpected finding, might be because of ethnicity or cultural differences. This is because going beyond a patient’s medical condition or their low literacy level, the participants who are multicultural nurses themselves are unsure why some patients refuse education. A participant (5/FL/S/M/ED) stated, *“The type of people that we receive in hospital due to cultural differences make it difficult to standardise the education we provide, some ethnicities are not interested in education, you talk with them and they are they non-acceptors of advice, they do not want to listen.”* Also a participant (12/M/S/SF) stated, *“In other countries, people respect and accept education more than the people here”*. Hence, it possible that multicultural nurses in Saudi Arabia are not fully aware of all the cultural or ethnically different responses towards health education, which may require further discussion in the following chapter.

#### **6.4.2.4. Theme 4. Administration-related barrier**

Another identified theme concerns administration-related barriers. The findings indicate the presence of several administration-related barriers, which originally were administratiin-related problems but became barriers to health education for hospital nurses. Those barriers were mentioned by nine participants, including staff, managers, Saudi and expatriate nurses. One of those barriers is the inadequate management of hospital problems by both nursing and hospital administration departments, which is reflected in nurse’s dissatisfaction with hospitals managing style. In particular, the previous quantitative data findings indicate that job satisfaction is a moderate barrier to health education.

This inadequate management leads to several problems that hinder nurses in their provision of health education. This inadequacy centred on management continues in nursing education itself. A nurse instructor (6/ml/ns/m/inst) stated, *“There is inadequate management of problems related to health education ... there should be the*

*right person in the right position ... I was also expecting updated information and resources about continuous medical education, but it's not as it is supposed to be."*

Another form of administrative barrier is lack of support and motivation toward nursing generally, and health education more specifically. This creates a non-motivational environment towards health education in the middle of a heavy workload, especially as health education is considered a secondary task. A participant (12/M/S/ST) stated, *"There is no motivation from the hospital administration, while the nursing department depends on the manager on duty, some are supporters and motivators, some are not, they break you down."*

In addition, the findings indicate a lack of training of trainers/ instructors in the continuous medical education of staff, and the presence of personal limitations among nurse instructors themselves. The participants even consider lack of support as a limitation of nurse managers. A participant (14/FL/NS/M/INS) stated, *"As for health educators or instructors here, they have to undergo some training. But saying and reminding, that will not help them, they have to attend courses, symposiums, in order to understand what kind of work, what kind of teaching they need to provide, benchmarking so they can use it in their hospitals."* Also, a participant (9/FL/S/ST/NE) stated *"One suggestion is to solve the language barrier, education is very important; from elementary school onwards they must learn English, as an instructor, I am not qualified to have this profession here because there is a problem with speak, and even comprehending, and even writing, and that is my observation."* Hence managers, instructors, might be in of need further training before they train or guide nurses.

Also, the work policy of nursing practice is not clear, which also affects the practice of health education itself. This uncertainty over role boundaries affects nurses' initiative, in that they prioritise other tasks in nursing, administration over health education, because of possible complaints or reprisals, not initiatives in doing tasks such as health education, being wary of making mistakes or making themselves too busy with other additional stuff that makes them ignore health education. A head nurse (5/FL/S/ER) said, *"The work policy is not clear, if the nurses do not know their role boundaries they will never be competent in this work, that will limit their steps from being worried about making mistakes."* Also, a participant (6/FL/S/SF) stated, *"We do other tasks, not even part of nursing, due to inadequate management of nursing here, which makes*

*us ignore health education”. Hence, the role of the nurse, professional areas of responsibility, boundaries, especially as nursing emerges as a vocational profession in Saudi Arabia, need to be clear, especially regarding health education. This point will be considered along with recommendations in the discussion chapter.*

Also, there is inadequate management of the patient’s role in hospital, as it commonly seen that large numbers of family members visit patients and stay in hospital for a long time, and as a result, they hinder general nursing care, including health education. The nurses believe there should be more restrictions on people there, despite cultural norms, because it becomes a problem for them. A participant (19/fl/ns/st) stated, “*The administration has to limit the watchers (she means the family member visiting patients); we cannot do anything because the watchers are contradicting us.*” Also, a head nurse (18/FL/NS/M/HE) stated, “*The administration needs to be more strict about some cultural problems here.*” Therefore, as previously identified, there are factors, such as inadequate management of hospital-related problems, an unclear nursing policy, lack of motivation and support, inadequate management of family role challenges, and lack of training of trainers/ instructors, that must be considered. Hence, how to manage that tension between involvement of the family unit and the need for clinical and other care to be delivered needs to be considered in the discussion chapter.

#### **6.4 Section 4. Cultural sensitivity and development strategies**

One of the objectives/ questions of the study is to identify any strategies that might impact on improving the delivery of culturally sensitive health education in Saudi Arabian hospitals. Therefore this section focuses on identifying what strategies or factors need to be considered to develop culturally sensitive health education in Saudi Arabia. The following table (41) summarizes the main identified qualitative and quantitative themes about cultural sensitivity development strategies and their subcategories

**Table (41) Summary of the main identified themes from qualitative data about strategies that need to be developed for cultural sensitivity in health education**

Theme of qualitative data findings		Theme of quantitative data findings	
Theme	Subcategory	Theme	Subcategory
At the level of the hospital system: 1-Consideration of the family role in health education	1- Influence from a positive role of the family as being important part of health education 2- Controlling the negative role while visiting or accompanying a patient that hinders nursing care or H.E.	General development strategies	1- Prioritizing health education as a primary practice in Saudi nursing policy. 2- Using the general media to encourage healthy behaviour. 3- Using Islamic health beliefs as health education tools.
At the level of the healthcare system: 1-Involvement of expatriate nurses	1-Involvement in higher levels of decision-making 2- Involvement in teaching Saudi nurses and sharing experiences.	Development of multicultural nursing workforce	1-Provide nurses with Arabic and cultural training courses. 2-Assign multicultural nurses to work with Saudi nurses on each shift to learn from each other.
2- Dealing with Saudi cultural norms	1- Dealing with the gender-segregation cultural norm. 2- Dealing with ethnicity differences in education	Dealing with gender segregation cultural norm.	1- Each gender provides health education to the same gender only.
3- Cooperation with community & public health organizations	1- Cooperation with primary healthcare centres to take a role in health promotion.		
4- Using media for health education	1- Use of TV, media and newspapers to send promotional messages.		

### **6.5.1 The quantitative data findings about cultural sensitivity and development strategies**

The fifth objective was to identify any strategies that might impact on improving the delivery of culturally sensitive health education in Saudi Arabian hospitals. For this, the questionnaire focuses on measuring strategies that could be useful to developing this culturally sensitive educational model. Three areas are targets: general strategies that might be useful to influence culturally sensitive health education practice in Saudi Arabia; strategies to deal with the gender segregation cultural norm; and strategies to develop multicultural nursing workforce practice of health education

#### **6.3.4.1 General strategies to develop cultural sensitive health education**

Many strategies were selected from the literature to be tested for their usefulness in developing culturally sensitive health education in Saudi Arabia. For the general development of culturally sensitive health education, four strategies were tested, which include: prioritizing health education as a primary practice, using the general media to encourage healthy behaviour, using Islamic health beliefs to influence health promotion, work with the clergy and mosques to encourage health education and health messages. Saudi cultural norms are very strict and followed by most of the population. Most of the suggested strategies are considered useful to developing culturally sensitive health education in Saudi Arabia. Only working with the clergy and mosques to encourage health education is considered moderately useful.

Prioritizing health education as a primary practice within Saudi nursing policy is considered useful. The highest percentage reported by the participants rank it as "very useful", and some believe it would be "extremely useful" (see Table 41). The mean ( $M=3.85$ ) indicates that this strategy could be useful for health education practice. The  $p$  value is 0.084, as shown in table (43), which provides a summary of the existence or absence of statistically significant differences between groups, indicating no statistically significant differences between Saudi and expatriate nurses regarding the perceived usefulness of this strategy. The mean score for Saudi or Arabic speaking nurses is 3.81, and 4.43 for the expatriate or non Arabic speakers of nurses. Hence, this strategy should help to develop health education practice.

**Table 42** showing The importance given to strategies to develop culturally sensitive health education

Strategies with ranking by nurses	Extremely useful	Very useful	Moderately useful	Slightly useful	Not useful	Mean
Prioritization of health education as a primary practice	19.9%	42.6%	23.2%	12.8	1.6%	M=3.85
Use of general media to encourage healthy behavior	28.4%	40.5%	20.2%	7.8%	1.2%	M=4.10
Using Islamic health beliefs for a healthy lifestyle	32.5%	37%	21.2%	8%	2.3%	M=4.02
Work with clergy and mosques to encourage health education	10.5%	31.9%	36.8%,	15%	5.6	M=3.03

**Table 43. Summary of the existence or absence of statistical significant differences between groups regarding strategies for developing culturally sensitive health education**

Strategies to develop culturally sensitive H.E.	Mann–Whitney U	Asymp. Sig. (two-tailed)	Summary of statistically significant differences between groups	Mean scores between groups	
				Arabic	English or other
Prioritise health education as a primary practice within Saudi nursing policy	29930.000	0.084	No statistically significant difference	Arabic	3.81
				English or other	4.43
Use of Islamic health beliefs (such as eating moderately, not smoking, etc.) to encourage healthy behavior	31776.000	0.574	No statistically significant difference	Arabic	4.34
				English or other	4.40
Use general media to encourage healthy behaviour among the population	30218.000	0.122	No statistically significant difference	Arabic	4.54
				English or other	4.30
Work with clergies and mosques to encourage health education & healthy messages	32529.000	0.930	No statistically significant difference	Arabic	4.10
				English or other	3.61
Provide Arabic language				Arabic	3.68

and cultural training courses	30865.000	0.259	No statistically significant difference	English or other	4.32
Recruit nurses with a background knowledge of Islamic and Arabic cultural values	24294.500	0.000	There is a statistically significant difference	Arabic	4.55
				English or other	3.73
Assign nurses from different countries to work with Saudi nurses in each shift in order to learn from each other	26856.000	0.000	There is a statistically significant difference	Arabic	4.12
				English or other	4.48

Using the general media to encourage healthy behaviour among the population is also strongly recommended by the nurses. This means using television, radio and other media to encourage people to enact healthy behaviours. Almost half the participants think this would be very useful (see Table 42). The mean (M=4.02) indicates that this strategy could be very useful. In addition, there is no significant difference between Saudi and expatriate nurses regarding the perceived usefulness of media as the mean score for Saudi nurses is (4.54) and (4.34) for the expatriate nurses. Therefore, large-scale public promotion and cooperation with others are needed and recommended.

Another useful strategy could be using Islamic health beliefs as health education tools, such as eating moderately, not smoking, personal hygiene etc. to encourage healthy behaviour and lifestyles. This strategy is ranked very useful (see Table 42) because the majority of the participants rank it as very useful and only a few report it as being only slightly useful. The mean (M=4.10) indicates that it could be more than a very useful strategy. In addition, as the p value of 0.574 is greater than 0.05, the mean score for Saudi nurses is (4.34), and (4.40) for the expatriate nurses, this indicates no statistically significant difference between both groups of nurses regarding the perceived usefulness of this strategy (see table 43). This could indicate that the expatriate nurses also knew that there are Islamic health beliefs that could be used as health education tools. Hence, this could be used a strategy to support health education.

Work with the clergy and mosques to encourage health education and healthy messages might be "a moderately useful strategy". Most of the participants believe it



would be a "moderately useful" strategy, as 36.8 % refer to it is being possibly "moderate useful". The mean (M=3.00) indicates that it could be moderately useful as the nurses perceive it. In addition, there is no statistically significant difference between Saudi and expatriate nurses regarding the perceived usefulness of this strategy (p=0.930, which is >0.05), and the mean score Saudi nurses is (4.10) and for the expatriate nurses (3.61) (see Tables 42, 43)

#### **6.3.4.3. Develop multicultural nursing workforce practice of health education**

Developing multicultural nursing workforce practice in health education is important, not because nurses' performance is low, but because they are working in a very unique and different culture, with a very multicultural nursing workforce. Therefore, three strategies are suggested to help them deal with work challenges. Two suggested strategies to encourage expatriate nurses to partake in health education were agreed by the participants as being very useful, and one would have a moderate usefulness. The first strategy is to Send those nurses on Arabic and cultural training courses. This strategy has a lot of support from most of the participants (see Table 44). The mean (M=4.01) indicates that this strategy would be very useful. Also, the previous findings about the importance of knowledge of the English and Arabic languages, and basic knowledge of sociology and culture both validate the need for Arabic and cultural training courses. For this strategy, there are no statistically significant differences between both groups of nurses, as the Mann–Whitney U test p value is 0.259, which is >0.05. The mean score for Saudi nurses is (3.68), and it is (4.32) for the expatriate nurses. Both cultural and language training courses were previously mentioned as being an aspect of learning needs, which could be consider to be another validation of the previous section regarding important subjects of knowledge for health education (see table 43).

**Table 44 showing Suggested factors to develop expatriate nurses' practice of health education**

<b>Factor with ranking by nurses</b>	<b>Extremely useful</b>	<b>Very useful</b>	<b>Moderately useful</b>	<b>Slightly useful</b>	<b>Not useful</b>	<b>Mean</b>
Send expatriate nurses on Arabic and cultural training courses	22%	38.8%	24.1%	10%	15%	M=4.01
Assign nurses from different countries to work with Saudi nurses	33.7%	38.9%	17.7%	6.8%	2.5%	M=4.32

Recruit nurses who have background knowledge of Islamic and Arabic cultural values	7.6%	14.8%	33.1%	26.1%	18.1%	M=3.05
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Another suggested strategy is to assign nurses from different countries to work with Saudi nurses on each shift to learn from each other, this strategy is highly recommended by the majority of participants (see Table 44). The mean (M=4.32) indicates that it would be a very useful strategy. There is, however, a statistically significant difference regarding this strategy, as the p value is 0.000, which is smaller than 0.05, thereby validating this difference (see table 43). This strategy is highly ranked and recommended by Saudi nurses, the mean score for Saudi nurses is 4.12, while it was 4.48 for the expatriate nurses, which may indicate that the Saudi nurses want to learn from experienced expatriate nurses, as was found in the qualitative data findings. Hence, this sharing of knowledge could help both parties, as the expatriate nurses can also learn from Saudi nurses about their culture.

Another strategy suggested is to recruit nurses who have background knowledge of Islamic and Arabic cultural values, which could be a moderately useful strategy. The majority of participants (33%) considered this would be moderately useful (see Table 44). The mean (M=3.05) indicates that it would be a moderately useful strategy. In addition, this strategy is more highly ranked by Saudi nurses than expatriate nurses, generating a statistically significant difference between both groups in their responses. The p value of 0.000 is <0.05. The mean score for Saudi nurses is (4.55) while it is (3.73) for the expatriate nurses. This may be due to Saudi nurses thinking that the complex Saudi culture requires nurses to have at least minimal cultural background knowledge in order to adapt to the culture. However, this strategy is still expected to be moderately useful. Hence, it may not be seriously considered.

#### **6.3.4.2 Gender segregation strategies**

Gender segregation is one of the main and complex customs that is known about Saudi Arabia even outside the country as previously mentioned in the literature, it is a cultural value very firmly held. The selected strategies mainly target Saudi male and female nurses, as expatriate nurses do not have problems dealing with the opposite

gender, and these strategies are selected to deal with this cultural value. Both the questionnaire and the interviews validate that it is very difficult to manage or change this cultural value. As a result, three out of four suggested strategies are believed to have a moderate impact, and the only strategy that is believed to be very useful in dealing with this cultural value is to keep things as they are.

The first suggested strategy is to assign health education work to nurses who accept providing education to both genders. This is predicted as having moderate usefulness. The mean (M=3.18) indicates that it is "moderately useful". This is because it is not common to see a male nurse talk to a female patient, though not vice versa. Even some male and female health educators cannot talk or educate freely or comfortably when educating the opposite gender on topics such as sexual health education, and some of them refuse to discuss such topics with the opposite gender (see Table 45).

The findings also indicate that there is no statistically significant difference between Saudi and expatriate nurses regarding assigning health education work to nurses who accept the provision of education to both genders ( $p=0.327$ , which is  $>0.05$ ). Both groups agree that this strategy would have a moderate impact on the complex nature of gender segregation in Saudi Arabia. Hence, no statistically significant difference is reported in the participants' responses (see table 45).

**Table 45 showing Suggested factors which might combat the culture of gender segregation**

Factor with ranking by nurses	Extremely useful	Very useful	Moderately useful	Slightly useful	Not useful	Mean
Assign health education work to Arabic speaking expatriate nurses	8.9%	20%	30.4%	26.5%	22%	M=3.15
Assign health education work to nurses who would provide education to both genders	11.3%	23.2%	24.9%	35%	5.4%	M=3.18
Encourage Saudi nurses to accept the provision of H.E. to the other gender as part of their nursing role	5.8%	8.8%	33.8%	36.8%	14.8%	M=2.91
Each gender provides health education to the same gender	20%	39.3%	19.3%	12.5%	8.6%	M=3.89

**Table 46. Summary of the existence or absence of statistically significant differences between groups regarding strategies for dealing with gender segregation**

Strategies to deal with gender segregation.	Mann–Whitney U	Asymp. Sig. (two-tailed)	Summary of statistically significant differences between groups	Mean scores between groups	
				Arabic	English or other
Assign health education work to Arabic-speaking expatriate nurses	20674.000	0.327	No statistically significant difference	Arabic	2.87
				English or other	4.83
Assign health education work to nurses who would provide education to both genders	30980.000	0.000	There is a statistically significant difference	Arabic	3.48
				English or other	3.93
Encourage Saudi nurses to accept the provision of health education to the both genders as part of their nursing role	27034.500	0.000	There is a statistically significant difference	Arabic	3.81
				English or other	4.03
Each gender provides health education to the same gender	27408.000	0.001	There is a statistically significant difference	Arabic	3.65
				English or other	3.97

Assign health education work to Arabic-speaking expatriate nurses. The nurses' answers indicate that it would be a moderately useful strategy. There is a range of what might be useful and the mean (M=3.15) indicates that this could be a moderately useful strategy (see Table 45). There is a significant difference between both groups of nurses regarding this strategy. The p value is 0.000, which is <0.05. This strategy is highly ranked by the expatriate nurses. The mean score for Saudi nurses is (2.87) while it is (4.83) for the expatriate nurses. The expatriate nurses may understand the Saudi culture and want to suggest this strategy as a solution, but they may aware that it has only a moderate impact, as will be shown in the qualitative data findings (Table 46).

Another strategy is to encourage Saudi nurses to accept providing health education to the other gender, which is also predicted to be of moderate use (see Table 45). The

mean ( $M=2.90$ ) indicates that this is a moderately useful strategy. There is, however, a statistically significant difference between Saudi and expatriate nurses regarding the perceived usefulness of this strategy, as represented by the P value of 0.000 (see table 46). The mean score for Saudi nurses is (3.81) while it is (4.03) for the expatriate nurses. This is because many expatriate nurses want to encourage Saudi nurses to accept the provision of health education to both genders, and so ranked this strategy more highly. This means that the expatriate nurse knew of this barrier and wanted to overcome it by encouraging Saudi nurses to deal with the opposite gender.

On the other hand, and opposing the previous strategy, the only strategy that is perceived by nurses to be 'useful' is that of each gender providing health education to the same gender only (see table 45). The mean ( $M=3.87$ ) indicates that nurses believe this would be a "useful" strategy. This suggests that some nurses believe that the only solution to this cultural value is to continue without change or encounter resistance to change. The findings also indicate the presence of a statistically significant difference between Saudi and expatriate nurses. The p value of 0.001 is less than 0.05, and the mean score for Saudi nurses is (3.65) and (3.97) for the expatriate nurses as shown in table (46). While the previous strategy was most often ranked more highly by expatriate nurse, this strategy (each gender providing health education to the same gender only), which opposes the previous strategy, mostly received higher scores from Saudi nurses. This means that the Saudi nurses disagree with expatriate nurses and do not want to work against their cultural values, despite the nature of their work. This researcher, however, understands this perception. Nurses in Saudi Arabia find it easier to work according to gender segregation roles. This is because even if Saudi male or female nurses accept working with the opposite gender, the community or public do not accept it. The public expects healthcare workers to be aware of cultural values and respect them; and hence, they create many problems if they are being treated by the opposite gender. That is why this strategy is believed to be very useful

Despite the presence of some reported statistically significant differences regarding some of strategies, the overall of all strategies as groups has no statistically significant differences between Saudi and expatriate nurses. The following table (47) indicates that there are no statistically significant differences in the responses of the study sample regarding 'strategies (general strategies, gender segregation, and developing a multicultural nursing workforce) that have to be considered for the cultural sensitivity

of health education' according to the native language variable. This might be attributed to Saudi and non-Saudi nurses have persuasion convergent or approximated levels of the importance of all of the provided strategies, as they all seek to achieve the same objective represented by improving the quality of services provided by Saudi and non-Saudi nurses in different hospitals.

**Table (47). Native language vs. recommended strategies for the cultural sensitivity of H.E.**

Dimensions	Ranks				Mann–Whitney U	Asymp. Sig. (two-tailed)
	Native Language	N	Mean Rank	Sum of Ranks		
Measure of recommended strategies for the cultural sensitivity of H.E.	Arabic	242	253.38	61318.00	31915.0	0.552
	English & other	272	261.17	71037.00		
	Total	514				

### **6.5.2. The Qualitative data findings about cultural sensitivity and development strategies**

For qualitative data, the researcher used an open-ended question about the strategies and factors that need to be considered for developing Saudi culturally sensitive health education. The appendix 7 (page 286) summarises the analyses, main themes and their subcategories. The key themes of the findings can be categorized into: strategies at the healthcare systems level, and strategies at the hospital level.

#### **6.5.1.1 Theme1.Strategies at hospital level (family role)**

The family in Saudi Arabia plays an important and major role in the life of Saudis, and the findings of this study reflect that role. The qualitative data findings indicate that two strategies are required to deal with two opposing roles of Saudi families in Saudi hospitals, one is a positive role, and one is a negative role towards nursing care generally and health education especially. The positive family role represented by being part of health education. Families can learn as well as their patients, they can

teach their patients at home, remind them about medical advice and become a continuous health-education tool for patients at home after discharge or during patient admission. Especially, family members are commonly seen accompanying their patients in hospital as part of Saudi culture. This role might be more important in paediatric and critical-care units, and for emergency-room patients. A participant (17/FL/NS/M/HE) stated, “We have to include relatives, mother and father, in health education.” Also, a participant (15/FL/NS/M/sup) stated, “Nurses do not only concentrate on patients, they also concentrate on relatives because they are always there. For continuous education, the family must be involved in it.” Hence, in Saudi hospitals, the family has to be considered to ensure the implementation of culturally sensitive health education in Saudi Arabia, and this was suggested by five interviewees.

On the other hand, there is another negative role of the family in health education, as mentioned by three interviewees. To understand this negative role, the researcher has to give a brief description about Saudi cultural norms. In Saudi Arabia, whenever there is a family member admitted to hospital or sick at home, all the family members and even family friends have to visit him and stay with him. The family members and visitors stay for a very long period of time and often stay beyond the end of visiting hours if the patient is in hospital. Another problem that is very commonly seen is more than one or two attendants for one patient in hospital, even if the patient does not need attendants. Also, another problem is that it is difficult for the patient, and yet if hospital security or staff inform family members or the patient’s visitors that they have to leave the house or hospital after the ending of visiting time it is considered to be culturally rude and unacceptable. Some others even insist on entering and attending patients in intensive care units outside visiting times.

This situation disturbs nurses and creates several problems leading to hindering general nursing care, including health education, because nurses have to do their daily nursing care tasks which are interrupted by a large number of visitors, their questions and their requests. A participant (6/ml/ns/m/inst) stated, “*I know it’s commonly seen to have a large number of relatives at the beside of the patient, even during resuscitation, I do not blame them because it’s part of the culture, but there is work to be done and procedures to be followed ... there is inadequacy management of such issues.*” Another participant (19/FL/NS/M/HE) stated, “*Health education depends on patient*

*and family willingness, we have at the bedside the patient's watchers or relatives, sometimes more than one or two watchers, they interfere with the education we provide ... The first kind of support is to limit the watchers, we have some problems with them, they contradict us.*" Therefore, at the hospital management level, there is a need for hospital nurses to include family in health education, an additional strategy is needed, to have more restricted actions against family cultural norms by controlling them with restrictions on visiting times and limiting the numbers of patient attendants. Those actions will probably create a more positive environment for nurses to provide ideal nursing care, including health education.

#### **6.5.1.2. *Strategies at the healthcare-system level***

At the healthcare-system level, the qualitative findings indicate that there is a need for two recommended strategies to distribute health promotion across the country, and to ensure these deal with culturally sensitive issues related to health education. Those include: cooperation and coordination with other community health services, such as public and primary healthcare centres, and using the media to distribute health-education messages.

##### **6.5.2.2.1. *Cooperation with community and public health organization***

The findings indicate that there are two reasons behind seeking help and cooperation with other healthcare centres. The main reason is that nurses feel that there are large numbers of patients who are in need of health education, especially in remote areas, and it is not possible for hospital nurses to reach those patients. Hence, the best option for hospital nurses is to suggest that primary and public healthcare centres get more involved in health education activities and those centres are closer to those patients. One participant (19/FL/NS/ST) for example stated, *"From my point of view, there are peripheral healthcare centres, the nurses there can provide health teaching for patients so they (patients) can learn before coming here."* Also, a participant (15/FL/NS/M/sup) stated, *"We cannot reach the very remote areas but we can ask for help from public healthcare centres, why don't we start there?"*

Another reason is that there are some Saudi cultural challenges to health education which are most often seen from patients coming from peripheral and remote areas. Those cultural challenges include: using herbal and traditional medicine practices, non-



acceptance of education by some ethnicities or ethnicity differences. Traditional medical practices are very popular approaches for treatment in Saudi Arabia, but these practices are more popular among people who live in the desert (Bedouins) and peoples who live in peripheral areas. Hence, public healthcare centres are closer to them, more aware of their cultural practices and may find it easier to educate them. A participant (19/FL/NS/ST) said, *“We have these patients coming from peripheral areas, they have different (traditional) ways of treating themselves, such as with bed sores, they apply their own creams.”* A participant (16/FL/NS/M/SUP) stated, *“Some patients use their own traditional medication, if we explain not to do that, they do not accept it.”* Therefore, a strategy that is needed is more ideal distribution of health education and health promotion interventions in the Saudi community in cooperation with other community and public health organizations, exactly as mentioned by one participant (17/FL/NS/M/HE), who stated, *“I think the patients here need more dissemination of health promotion and general awareness, I think the dissemination of health promotion here is not like in other countries.”* It is also important to remember that the previous quantitative data findings indicated another type of cooperation that could be used, which is working with the clergy and mosques to encourage health education and health messages. This represents an aspect of community organisation that is controlled and funded by the Saudi government, meaning that the Saudi MOH can also cooperate with mosques to distribute health messages.

#### ***6.5.2.2.2. Using the media for the distribution of health education***

Another recommended strategy is using the media for health-education purposes, as advised by three interviewees. In addition, the previous quantitative data findings indicated the importance of this strategy. The findings provide an explanation of this suggestion and indicate two reasons for advising using this strategy. The main reason is to reach large numbers of people to address previously reported cultural practices such as using non-medical treatment, to send healthy messages to the Saudi community, and even to encourage Saudi nurses to accept working with male patients or male colleagues, as suggested by one participant. That participant (12/ml/s/sf) stated, *“Health education should start at home, we can use the media, peripheral health centres can do that, we also need cooperation from others.”* Also, a participant (18/FL/NS/M/HE) stated, *“Even TV, media and newspapers can be used to educate*

*nurses and the community.*” Hence, the medical media could be a useful strategy, as previously validated by the quantitative data findings.

#### **6.5.2.2.4. Strategy for gender segregation (for Saudi nurses)**

Also, the qualitative data findings indicate the need for two other strategies for hospital nurses, and both require interventions from a higher health authority. One is for Saudi nurses, which is about dealing with the gender-segregation cultural value, the other one is for expatriate nurses and reflects the need for more involvement of expatriate nurses in decision-making. For all Saudi nurses and expatriate nurses in Saudi Arabia, gender segregation is still a strong cultural value, as it affects daily nursing practice and the practice of health education; it can be considered a strong barrier, as mentioned by nine interviewees. The problem, however, is that there is disagreement between nurse managers and staff nurses about how to deal with it.

The qualitative data findings about strategies for the development of culturally sensitive health education indicate that most participating nurse managers believe in encouraging Saudi nurses to work in a mixed environment with males. The managers want a radical solution to the impact of gender segregation, they suggest using nursing education in the pre-registration period to teach Saudi nurses about the nature of nursing work and that, despite the culture, working in a mixed environment with male colleagues and male patients is a mandatory issue and not optional. A participant (8/FL/S/M/ST) stated, *“Working with mixed genders in nursing work has to be clearly stated from the beginning of nursing study.”* Also, one participant (5/FL/S/M/ED) agree and stated, *“It should be stated from the beginning to all new staff nurses that nurses have to work with males and females despite the culture.”* On the other hand, this suggestion does contradict the staff nurses’ desire. It is important to remember the quantitative data findings that reflect staff nurses’ answers and indicate that staff nurses do not agree with nurse managers about encouraging or forcing Saudi staff nurse to work with male colleagues or male patients, they want to keep things as they are. Hence, it is not clear what strategy can really work and deal with gender segregation. This is discussed in detail in the following chapter.

#### **5.6.1.2.3. *More involvement of multicultural nurses in the health authority***

The last strategy that requires action from higher authority is more involvement of multicultural nurses in decision-making. Expatriate nurses are actively involved in hospitals as all the nurse managers recruited for this study are expatriate nurses except for one Saudi nurse manager. The point is that there is a need to involve those expatriates at the highest level of nursing and health authorities in Saudi Arabia. Those nurses are highly qualified and experienced and come from different nursing education schools. That means sharing their experiences could help to provide better general management of nursing that could be reflected in health education. This was agreed by five participants, including males, females, staff and nurse managers. A nurse manager (6/ML/NS/M/INS) stated, *“The regional office has to include the expatriate nurses in policymaking and collection of their practice.* Also, a participant (11/ML/NS/M) stated, *“From the beginning there is big hole here, there is no involvement of expatriates, the government must actively involve expatriates in solving health - education problems.”*

Another type of involvement of expatriate nurses is to benefit from their experiences to teach new nurses, especially Saudis. Even Saudi nurses believe that expatriate nurses can be good teachers for Saudi nurses in daily nursing practice, and their involvement means sharing experiences with each other. A nurse (14/f/ns/m/inst) stated, *“They (the expatriates) have very good education about health education, they can help and educate other nurses, such as Saudis.”* Also, a Saudi nurse (12/M/S/SF) stated, *“The Saudis can learn from the expatriates.”* Hence, the Saudi health authority (MOH) can get more advantages from expatriate nurses, beyond their practice in hospitals, by developing nursing care, including health education, but the important point, however, is that there is a need to remember the language barrier, meaning there is a need to solve the language barrier first to ensure that expatriate nurses are actively able to teach Saudis without hindrance. This will be discussed in detail in the following chapter.

Therefore, a summary of this section about strategies for developing culturally sensitive health education includes: More involvement of multicultural nurses in the health authority; using the media for the distribution of health education; cooperation with community and public health organisations; and consideration of families as an

important part of health education with restrictions on actions against their negative behaviours during their presence in hospitals.

#### **6.4 Conclusion**

The results cover a variety of very important and essential skills for health education practice, and they represent a top training priority for hospital nurses, as nurses have a low level of confidence in their performance of these skills. In addition, there is a need for specific and comprehensive health education with a consideration of educational-related problems. These problems include a lack of sufficient and effective training in health education and the language inconsistency of nursing education. In addition, the presented findings indicate several barriers to health education. Some of these barriers are related to patients, nursing, nurses, the workplace, and administration. The study identified several strategies that could help to develop a culturally sensitive model in Saudi Arabia. These include the usage of media, more cooperation with other public healthcare centres, more involvement of the expatriate nurses at higher levels of decision making, the updating of nursing policies, and more training opportunities for both Saudi and expatriate nurses. There are, however, several statistically significant differences between the Saudi and expatriate nurses regarding some skills, some subjects of knowledge, barriers to health education, and the perceived usefulness of strategies for developing culturally sensitive health education practice.

## **Chapter 7 discussion**

### **7.1. Introduction**

Due to the huge amount of data, the discussion is divided into two chapters, this chapter and the model chapter (Chapter Eight). This chapter will discuss the three main themes from the findings of the study in comparison with the findings from other literature. Those are: barriers to health education, learning needs of health education in terms of knowledge and skills, and strategies to develop culturally sensitive health education. Due to the presence of multiple subcategories in each theme, some subcategories are repeated in all themes, such as communication, which is part of learning needs and barriers; hence, the researcher will discuss it once to avoid repetition.

In addition, this chapter conducts the discussion by considering the operational definition of a practice-based, culturally sensitive health education model, which is defined as “a systematically organized educational framework that is built based on theoretical assumptions and evidence-base findings about practice-based and cultural sensitivity in health education. This aims to promote nursing education actions that use health education knowledge and skills to produce the most desirable health education outcomes in consideration of cultural sensitivity in care which should support hospital nurses in their delivery of health education, and dealing with challenges in the practice of health education in a hospital environment.” This is important to this research as its work involves a new project, which lacks evidence that is needed to discuss some points critically.

In addition, this chapter will discuss the summary of the findings (table 48) and their relation to each other. This linkage is very important for the study aims. This is because the researcher has noticed that the findings relate to each other and that nurses can use the same identified learning needs to deal with barriers identified by the study; hence, the model can use them in its design. This chapter adopts a pragmatic approach to influence the discussion chapter. This means the researcher uses leads and data to influence justification of the conclusion to the discussion. The strengths, limitations, implications, and the final model design of the study will be discussed in the next final chapter.

**Table (48) Summary of the qualitative and quantitative findings of the study**

<b>Qualitative data findings regarding education-related objectives</b>	
<p><b>First: Nurses have two types of learning needs, including:</b></p> <p>1-General comprehensive subjects of knowledge and skills for health education practice.</p> <p>2-The need for specific subjects and skills for health education, such as Arabic and English language training courses and teaching.</p> <p><b>Second: Nursing education in health education is affected by:</b></p> <p>1- Language inconsistencies between nurses as learners and their instructors, this factor needs to be considered to ensure nurses receive information appropriately (pre- &amp; post-registration).</p> <p>2-The quality of nursing training in health education affects the practice and level of confidence of hospital nurses during their practice of health education (post-registration).</p>	
<b>Quantitative data findings regarding education-related objectives</b>	
<b>Highly important skills of health education</b>	<b>Moderately important skills of health education</b>
<p>Communication; Active listening; Problem-solving; Coordination; Social interactions &amp; Perceptiveness and Appropriate selection of learning strategies, Time management</p>	<p>Critical thinking</p>
<b>Highly Important subjects of knowledge</b>	<b>Moderately important subject of knowledge</b>
<p>Knowledge of education/ teaching/ instruction; English &amp; Arabic language; Knowledge of mean of communications; Basic knowledge of human psychology; Counselling; Administration &amp; management; And basic knowledge of sociology &amp; culture.</p>	<p>Non reported as moderate</p>
<b>Qualitative data findings regarding barriers to health education</b>	
<p><b>The barriers to health education can be categorised into:</b></p> <p>1- <u>Nature of nursing work-related barriers:</u> lack of time, shortages of staff, and pressure of workload.</p> <p>2- <u>Patient-related barriers:</u> include: Patient’s medical or psychological condition, patient’s cooperation or refusal of education.</p> <p>3- <u>Nurse-related barriers:</u> Communication or language barriers and the psychological status of individual nurses, such as lack of interest in learning or providing health</p>	

education. 4-Hospital administration-related barriers: Inadequate management of Continuous Nursing Education (CNE), and inadequate management of workplace-related problems.	
<b>Quantitative data findings regarding barriers to health education</b>	
<b>Sever barriers of health education</b>	<b>Moderately barriers of health education</b>
Lack of a good educational environment, Lack of teaching tools for patient education, Insufficient time for education, Lack of acceptance of nursing in the community, Lack of patient education in clinical nursing programmes, Lack of a common language and culture of communication	Job satisfaction, The existence of anxiety and pain in a patient, Lack of knowledge about methods to educate patients Frequent shift rotation of nurses, Lack of scientific sources for patient learning, and Lack of willingness from patients to learn
<b>Qualitative data findings regarding strategies for the development of culturally sensitive health education</b>	
At the level of the hospital system: 1- Consideration of the family role in health education. At the level of the healthcare system: 1- Involvement of expatriate nurses; 2- Dealing with Saudi cultural norms; 3- Cooperation with community & public health organizations; 4- Using the media for health education.	
<b>Quantitative data findings regarding barriers to health education</b>	
<b>Highly recommended strategies for cultural sensitive health education.</b>	<b>Moderately recommended strategies for cultural sensitive health education.</b>
1-Prioritizing health education as a primary practice, 2-Using the general media to encourage healthy behaviour, 3-Using Islamic health beliefs to influence health promotion, 4-Respecting of gender segregation cultural value (each gender provide care for similar gender), Provide multicultural nurses with Arabic and cultural training courses, 5-Assign nurses from different countries to work with Saudi nurses to learn from each other.	1-Working with the clergy and mosques to encourage health education, 2-Recruit nurses who have background knowledge of Islamic and Arabic cultural values

## **Discussion of Barriers to health education**

The previous table (48) summarised all of the study findings including barriers to health education. By looking in depth at the major barriers identified and other barriers identified indirectly using strategies to develop culturally sensitive health education, the barriers to culturally sensitive health education can be categorized into three main groups: culture, workplace and educational related barriers.

### **7.2.1 Culture related barriers**

Culture related barriers are identified as severe barriers in the study and these clearly reflect the impact of culture on health education. The major cultural barriers identified in the study include: gender segregation, nursing acceptance in the community in a wider society, and the lack of a common language and culture of communication.

#### **7.2.1.1. Lack of a common language and culture of communication**

These two findings are related to each other. The study has found the lack of a common language and culture of communication to be major barriers to health education. Also, the study finds that communication skills and means of communication are important subjects of knowledge and skills in health education, along with a good confidence level for participants' communication skills. To discuss both findings accurately, it is important to notice that the lack of a common language and culture of communication actually comprises two main barriers: a language barrier and a culture of communication barrier. The reason for considering them as one barrier is that communication, as defined by Giger & Davidhizar (2002, p. 185), is "the entire world of human interaction and behaviour. Communication is the means by which a culture is transmitted and preserved." This means language is considered within the definition of culture (Andersen & Taylor, 2011, p. 31). Therefore, the lack of a common language and culture of communication has to be seen as one factor that reflects Saudi culture, which could also be present in other multicultural communities.

As a very multicultural country, a language barrier is expected in Saudi Arabia. This study indicates that in multicultural societies, in the presence of ethnic variation and



different customs, beliefs and spoken languages, all those factors mean nurses face challenges when communicating with people in order to provide effective health education. Similar findings and conclusions are reported by other studies (Nasir & Nasir, 2006; Farahani et al., 2011; Aldossary et al., 2012) and other publications (Falvo, 2010, p. 267; Beagley, 2011) that highlight that language is a major and common barrier to health education.

Several authors (Poisson, 2009; Lamiani & Furey, 2009; Visser & Wysmans, 2010) provide various strategies to deal with language barriers. As the intended model is educational, the solution starts with learning Arabic and English language for a number of reasons. Knowledge of Arabic and English is recommended; it is an important subject of knowledge for health education, as found by this study. These two languages are the native and official speaking languages in Saudi Arabian hospitals. This result matches previous studies (Bommel, 2011; Halligan, 2006; Nasir & Nasir, 2006; Sidumo, 2007) which found a need for the nursing workforce to learn basic Arabic and English. Nasir & Nasir, (2006) found that learning Arabic makes it easier for health educators to provide accurate patient education. This is because, according to Wurzbach (2002), in a high-context culture such as the Middle East, learning non-verbal communication signs is not enough to provide patient education; this is because patients there use both verbal and non-verbal communication to send or receive messages. Without a basic common language in such communities, it becomes difficult to understand, communicate and educate patients.

In addition, Poisson (2009) suggests that nurses participate in macroscopic and microscopic activities. Macroscopic means increasing nurses' awareness of current legislation regarding language services in healthcare. They can also follow the legislation and become active in advocating language services. Microscopically, nurses can be aware of the client's language and culture, when caring for clients in all settings, because these are too integral a part of their identity to be ignored. This indirectly validates the findings about the Arabic and English languages as a subject for health education practice, and it revalidates the importance of training on those issues (Visser & Wysmans, 2010; Lamiani & Furey, 2009). Nasir & Nasir, (2006) believe that learning Arabic could be challenging for non-native nurses as the Arabic language is a language rich in words and with many different meanings and concepts

related to health promotion and health education. Unfortunately, while there are a few Arabic language-training courses in some hospitals, it is not available all Saudi hospitals (Halligan 2006), this probably affects the personal action of nurses' managers of those hospitals as they notice the language problem. Also, at the level of the Saudi Nursing Policy and Procedures Manual (NPPM) (MOH, 2011), which is the official reference for hospital nursing care practice in Saudi Arabia, especially the policies for Nursing Education (GNR-07-01) and Nursing Orientation (GNR-07-02), there is support for elevating nurses' communication ability, but nothing is mentioned to provide orientation in the basics of Arabic or English via language courses. Therefore, policymakers of the General Directorate of the Nursing Department (GDND) have to update their policies to ensure they support the provision of Arabic and English languages courses as this would provide nurses with a better understanding of communication. The implication for the Saudi MOH is that there is a need to consider Arabic training courses, as the majority of the nursing workforce in Saudi Arabia are expatriates, representing around 67.7 % of the total number of nurses in Saudi Arabia (Almutairi and McCarthy, 2012; MoH, 2011a).

On the other hand, a culture of communication also has to be linked to the language barrier because Saudi Arabia is well known as a very cultural-context country. This means that communication there is a mixture of verbal and non-verbal and people there often send implicit messages indirectly in consideration of the cultural form of communication (Almutairi and McCarthy, 2012). In Saudi Arabia, when someone asks a girl for her opinion on marriage, she will reply to men with silence and shyness if she accepts. She will reply to women by saying directly yes or no. Hence, nurses require full awareness and understanding of Saudi cultural communication. This may explain why knowledge of the means of communication and communication skills are both perceived to be very important for health education by this study in order simply to deal with the lack of a common language and culture of communication as a barrier.

The importance of communication has also been demonstrated by previous studies (Visser & Wismans, 2010; Gozdziński et al., 2012). And similar findings were reported by Bernstein et al. (2004) regarding a good competent level in communication skills among participants. Considering that the aim of this study is to design an educational model, making nurses good communicators through education is possible

but could be challenging for nurses. The studies of both Visser & Wismans (2010) and Lamiani & Furey (2009) found that in-service communication training is an important way of achieving long-term improvements in the quality of patient education in nursing departments in hospitals.

Other studies (Chaffee, 2000; Lamiani & Furey, 2009; Farahani et al., 2011), however, view good communication as a difficult skill to learn because nurses as patient educators must be knowledgeable and skilled in a difficult communication process. Lamiani & Furey (2009) state that good communication is a continuous process of paraphrasing, checking for understanding and teaching back. Chaffee (2000) states that nurses as communicators should be skilled in six stages of the communication process: planning and strategy selection, selection of channels and material, development of materials and pretesting, implementation, assessment of effectiveness and feedback to redefine the educational programme and ensure successful communication and emotional exchanges. All those processes according to Farahani et al. (2011) should always be conducted in a formal systematic way. Therefore, the intended educational model of this study can use one of the recommended subjects of knowledge and skills (knowledge of Arabic and English, means of and skills in communication) to solve, remove or lower one of the barriers identified in the study (lack of a common language and culture of communication). Hence, this should "support dealing with challenges in the practice of health education in a hospital environment", which reflects the model's operational definition. This could help to reflect the meaning of a practice-based model, a model that can help nurses in their practice beyond their educational needs.

#### **7.2.1.2. Gender segregation barriers**

Gender segregation is defined by Shahi (2013, p. 163) as the "official systematic segregation of unrelated men and women in the public sphere in Saudi Arabia". It is generally present in Arab culture, but it is more restricted in Saudi Arabia where its style make it one of the unique cultural norms of the country (Altorki & El-Solh, 1988). In Saudi Arabia and according to Shahi (2013), this segregation is present in all aspects of life in Saudi Arabia, such as social life and public celebrations, the design of healthcare institutions, public and private education, all to ensure consideration of gender segregation (Shahi, 2013).

This cultural value has a strong impact on life in Saudi Arabia, including Saudi hospitals. Some of the Saudi population has a negative attitude towards Saudi nurses. The conservative nature of Saudi culture perceives the nursing profession to be inappropriate for women because it requires them to engage with male co-workers or male patients (Brown & Busman, 2003). Several Saudi studies about nursing retention have found that the lack of gender segregation or mingling with men is one of the main factors of Saudi female nurse retention (Al-Sanabary, 1993; Al-Omar 2004; Mebrouk, 2008). Hence, it is inappropriate to expect that nurses will feel comfortable with providing patient education in the presence of such cultural challenges (Almutairi & McCarthy, 2012). The findings show that there is a statistically significant relation between speaking the native tongue and each gender providing health education to the same gender only. It shows that Saudi nurses mostly prefer a gender-segregation strategy in order to adhere to cultural values.

In addition, the refusal of Saudi staff to deal with the demands of the opposite gender probably has side effects on expatriate nurses. This will probably increase the workload of expatriate nurses as someone has to handle patients' needs. Also, head nurses can request pulling expatriate nurses out from other departments to deal with refusals. While the qualitative data findings indicate that nurse managers recommend encouraging Saudi nurses to accept working with males, the quantitative part has assessed four strategies to deal with the cultural value of gender segregation. These are: assign health education work to nurses who accept providing education to both genders; encourage Saudi nurses to accept providing health education to the other gender; assign health education work to Arabic-speaking expatriates; each gender provides health education to the same gender only. Among these, the only strategy that is perceived by staff nurses as being very useful to deal with this cultural value is that each gender provides health education to the same gender only. This means caring and health education for patients of the same gender only, then all problems related to gender segregation will probably disappear. That is why expatriate nurses also agree that this strategy would be useful, because then they will not face such challenges, especially there are no statistically significant differences between the groups about this solution to gender segregation. Unfortunately, no Saudi literature has the audacity to discuss gender segregation beyond the barriers it raises in healthcare. This is because Muslim communities, supported by the clergy, believe that gender segregation is an

Islamic necessity and must be followed without question (Sobehart et al., 2009). Joseph & Najmabadi (2006) mention that, in Islamic countries, and more specifically for Arabic countries which are more similar to each other in their cultural values, it all depends on the political system, education and the degree of implementation of Islamic instruction in everyday life, including gender segregation. Hence, this study finding about gender segregation could be different if the study was applied in other Arabic or Islamic countries. In conclusion, from this result, this researcher is from the same culture and believes it is very strong and difficult to change it.

#### 7.2.1.3. **Nursing acceptance in the community.**

It is another barrier that originally related to a gender-segregation cultural value. While nursing work requires working closely with both genders, men and women, life in Saudi Arabia, culturally, religiously and according to regulations, is totally restricted by strong gender segregation roles. Even though both genders are fully supported by the whole healthcare system and there are exceptions within healthcare facilities for them to work with each other, being a nurse means breaching this strong cultural value, and this creates negative public perceptions of nurses. Even if nurses do not have a problem with dealing with the opposite gender, the community say that nurses do not respect the culture, are not shy and could have relationships out of marriage with each other because of the mixing of the genders, which is a cultural crime. This issue affects both genders in Saudi Arabia but female nurses more than males. This is because marriage in Saudi Arabia is arranged by the family, they are the ones who choose a bride for their son, and families do not like women or girls who work with men to be the wife of their son. This means that being a nurse jeopardizes a nurse's reputation and affects their marriage prospects and their relation with their husband and close family members. This perception was previously found by Gazzaz (2009) who reported that nursing is perceived as bringing shame and humiliation to a nurse and their family.

Another example related to nursing acceptance in the community is that often Saudi patients prefer physicians for education as they are seen in the community as being superior or the boss in terms of knowledge and treatment. A similar belief was reported in the findings of Farahani et al. (2011) who show that, in Iran, patients prefer physicians to educate them because there is a cultural belief that physicians are more

knowledgeable than nurses. Hence, the culture can negatively impact on nursing practice in health education (Beagley, 2011), and as Mebrouk (2008) states, the perceptions of nursing care are closely linked to the cultural values of nurses. This researcher, however, believes that it is possible for this model to deal with the cultural barrier. This will be discussed in the following sections.

#### **7.2.1.4 Solutions for culture related barriers**

Dealing with such cultural barriers requires several actions from different sides. It starts with the highest health authorities, such as the Saudi MOH, and policymakers' roles to take account of those culture-related barriers. Eshah (2011) mentions that due to cultural differences, health authorities' policymakers have to consider local cultural values and beliefs because successful Western health promotion does not necessarily lead to success in health promotion in Eastern countries. Eshah disagrees with this researcher's description of the role of cultural issues in health promotion and mentions that policymakers must not see the role of culture as a barrier, as their research describes, but rather embrace the cultural dimension in health, this researcher believes that the point is not how to look at but rather how to deal with it.

The Saudi MOH as a health authority supports and takes account of the cultural dimension in health but does not succeed on that basis alone (MOH, 2012), it needs to know how to deal with it. Looking back at the study findings, one of the findings and recommended strategies to develop culturally sensitive health education is to use media. Several Saudi and international studies have found that media are very useful as a health education strategy (Saleh et al., 1999; Jaramillo, 2001; Hasim, 2000). Also Bastable (2005) lists many advantages of using media in patient education. These include: wide use as an educational tool, flexibility in use for different audiences, reaching large audiences and being inexpensive. Several international organizations view the use of mass media in health promotion and health education as the responsibility of health authorities and policymakers as it requires financial support (Unit For Sight, 2013; Wallack, 1990; WHO, 1996; World Health Forum, n.d.). What is important for this researcher regarding using media is to increase Saudi nurses' self-esteem vis-à-vis previous cultural beliefs. This self-esteem, according to Swansburg & Swansburg (2002), can be increased by trust, support and motivation, communication

and commitment between nurses and their surrounding community. That is the role that media should consider in order to be an effective tool to counter Saudi cultural beliefs that inhibit nurses in their role in Saudi Arabia. Clark & Lester (2000), as cited in Rankin et al. (2005, p. 231), however, consider that media cannot be used in place of educators but can be used in combination with other teaching interventions as a supportive tool to promote different types of learning.

The challenge with the Saudi MOH's strategic plan (MOH, 2012, pp. 69-100) is that it agrees with the importance of media but uses media for other issues, rather than supporting health promotion and health education. "The second goal of the MOH is to establishing a culture of institutional work and raise the level of quality and performance measurement and monitoring by support for MoH Presence in Media Channels." Hence, based on this research finding, there is a need to update the strategic plan to ensure it makes more effective usage of media. Dill (2013) notes that there is lack of research tools that are used to assess the media as tools for health promotion research and that it is difficult to measure media outcomes for health promotion learning. This means that media usage for health education purposes in Saudi Arabia requires further exploration and further research. In addition, further action inside hospitals is also required during the nursing orientation phase. According to Almutairi & McCarthy (2012), there is a need to teach people who are unfamiliar with Saudi culture about Saudi cultural values, such as gender segregation, especially for expatriate nurses who need to know about this cultural value. Hence, dealing with such culture-related barriers requires two-dimensional action, both inside and outside hospitals.

Some cultural beliefs such as nursing acceptance in the community may disappear because, according to Wallace & Rusk (2010), many people tend to abandon their culture and their beliefs as their cultural values and beliefs decrease over time due to globalization, immigration, the Internet and media. This according to Al-Abri (2010) is happening in Saudi Arabia as the negative view of nursing acceptance in the community has decreased in comparison with two decades ago, especially in the big modern cities (Al-Abri, 2010), but it is still strongly present in Saudi communities in rural areas, such the south and north of Saudi Arabia which are reflected in this study, which may indicate that more attention should be paid to rural areas, and media can

play a significant role to decrease such views. Hence, media could be a useful tool to change those beliefs, raise awareness of the importance of the nursing role, create feelings of respect and trust from the community towards nurses (Al-Abri, 2010), decrease the time provided for education which nurses often complain about and reflect another form of motivation for nurses, as this would reflect cooperation from others regarding the provision of health education.

Therefore, from the previous discussion, one important point contributes to the model's design, this is the repeated relation between the three main themes of the findings. This means the model can use one of the recommended strategies from the findings to deal with or solve one of the barriers identified by the study. Hence, by dealing with this barrier, nurses would be able to provide culturally sensitive health education. The study intends to design a model of health education for hospital nurses based upon the research evidence, and the researcher wants to take action in the hospitals and to use their resources to decrease the dependence on other external resources as much as possible, e.g. media which are expensive to use, even to produce short health promotion messages, and so funding might not be available, however, when dealing with a culture like the Saudi one, the previous discussion indicates that to develop nursing practice for health education inside hospitals, some actions are required from outside hospitals, and support from the highest health authority.

### **7.2.2. Work-related barriers**

The survey findings have identified three major workplace-related barriers: lack of time or insufficient time for education, lack of a good educational environment and lack of teaching tools for patient education and several other administration-related barriers (see page 185 for more details). The researcher chooses to separate lack of time from the other two education related barriers (lack of a good educational environment and lack of teaching tools for patient education) and put them in a new category called education related barrier for the purpose of discussion.



### 7.2.2.1. *Lack of time*

Lack of time to provide health education is another major barrier identified by this study and was linked by the participants with shortages of staff and the pressure of work. Lack of time is a barrier often reported by other studies in the literature (Aghakhani et al., 2012; Avsar & Kasikçi, 2011; Barber-Parker, 2002; Bergh et al., 2012; Casey, 2007a; Casey, 2007b; Park, 2005; Wright et al. 2009). Also, some of the literature mentions that time is a major obstacle to health education (Bastable, 2005; Falvo, 2011; Freda, 2002; Rankin et al., 2005). There are however possible solutions to deal with time constraints.

Learning of management is one of the main suggestions to deal with time constraints, especially as the study findings indicate that learning time management is perceived to be important for health education practice as there is a low confidence level for time management among hospital nurses. Even though the study intends to design an educational model, it does not necessarily mean that learning time management is the best choice. While no studies were found that investigated the importance of time management skills for health education practice for comparison, some authors, such as Wood et al. (2011), strongly believe it is important for nurses to have time management skills to be applied to a wide range of patient education tasks, especially, this study has found that time is a major constraint on health education, which might mean that it has to be a requirement for hospital nurses for health education practice. On the other hand, Rankin et al. (2005, p. 174) argue that time management skills are not so important; rather, with good observation and assessment, benefits can be gained as result of a good assessment which should save time, otherwise the educational interventions that are conducted will often be ineffective and additional time will be required. Meanwhile Hagglund (2010) believes that further research on time management is needed to clarify the role of time management in health education.

Another option to deal with time constraints is to seek managerial support. This is because a lack of time is often linked with staff shortages and the pressure of work as found by this study and Llahana (2005), meaning that to solve it there is a need to address both factors. This researcher believes that educating nurses in dealing with time is better than seeking managerial support for two reasons. First, if managers were

able to solve shortages of staff and workload pressure, which represent the sources behind the lack of time, then this problem will no longer exist according to this study's findings.

In addition, the study findings indicate a low confidence level for time management among nurses. Even this finding opposes the findings of Bernstein et al. (2004) which indicate that 61% of participants were confident in their time management skills, but it is still an important subject of knowledge for health education practice. Time management as described by McFarland et al. (1984) is the effective and efficient use of time. By considering time management as part of their learning needs, nurses, according to Sullivan and Decker (1992), would be able to reschedule their work tasks and reprioritize them, and that will help to save more time for emergencies or additional tasks such as, in this case, health education. Hence, nurses would solve or decrease the impact of time constraints which are reported as a barrier and not wait for solutions to come from others. Teaching time management has to be part of the desired educational model, but first it would be better for both the policies of Nursing Education (GNR-07-01) and Nursing Orientation (GNR-07-02) in the Policy and Procedures Manual (NPPM) (MOH, 2011) to be updated to ensure they teach nurses time management as this is currently omitted, influence is required on the health education practice of hospital nurses.

#### ***7.2.2.2.Lack of a good educational environment***

The education related findings as reflected in three dimensions require careful attention: education related barriers, educational learning needs and culturally sensitive development strategies. This study finding indicates that the lack of a good educational environment is a barrier to health education. The lack of a good educational environment in hospital is an old and ongoing challenge. Some studies have found similar results (Berland et al., 1995; Atkinson et al., 2009; Rahmani et al., 2011; Aghakhani et al., 2012), i.e. that nurses and student nurses have a negative viewpoint and are challenged by the learning and education environments in hospitals. Some authors (Bastable, 2005; Beagley, 2011; Berland et al., 1995) have found that the hospital environment inhibit nurses' efforts in a health promotion role.

In the Saudi NPPM (MOH, 2011), the policies for nursing administration (GNR-01-06 to GNR-01-24) report that controlling a noisy and distracting environment for nursing care is the responsibility of managerial personnel, such as nursing directors, supervisors and head nurses, but staff nurses can assist in the control of noise. The hospital educational environment could be controlled with health education skills. Support for this idea comes from Connor & Ortiz (2009) who found that it is possible to educate nurses about managing a workplace's noisy environment, and participant nurses did succeed in controlling some disturbing factors. Avsar & Kasikçi (2011) suggest training nurses in how to create and control the educational environment in a hospital. This means to learn the principles of selecting the right place and time and being aware of the physical conditions that hinder patient education. Hence, nurses can manage their hospital environment to make it more suitable for education and increase the chances to provide more patient education.

In addition, other skills, such as active listening skills which are also perceived to be important for health education, have an indirect role to play to control the hospital environment. While there was no study found that measured the importance of or nurses' confidence level in active listening skills for health education, the importance of active listening skills is highlighted in the literature (Antai-Otong, 1998; Benson & Latter, 2004; Dreeben-Irimia, 2010; Kinmonth, et al., 1998; Tatsumi, et al., 2009). Antai-Otong (1998) mentions that nurses using astute observational and active listening skills is necessary to respond appropriately to a disturbing work environment to improve the provision of health promotion. Nurses can adjust the room, location and time to ensure they are active listeners. This can also support a hospital environment being controlled by other skills, and hence, nurses themselves can overcome the lack of a good educational environment, as identified by this study.

Training in active listening skills would have some advantages. Benson & Latter (2004) mention that nurses need to utilize interpersonal skills including active listening in order to operationalize health education effectively and offer education that goes beyond traditional patient education practice. Such training would indirectly improve other skills needed for health education. Tatsumi et al. (2009) found that such training improves conversation and communication, and support at work becomes smoother. Moreover, as this study outcome seeks cultural competency, Dreeben-Irimia (2010, p.

368) claims that the active listening skills for cultural competency in patient education within a cultural context are more important than regular patient education because educators have to be active listeners and also culturally aware and sensitive. Hence, despite this skill originally being identified by nurses as part of their learning needs, to become competent in culturally sensitive health education, may indirectly make them competent in adjusting and managing a challenging daily workplace environment that affects the provision of health education. Hence, similar to previously identified barriers, another perceived important skill could deal with an additional identified barrier; therefore, it has to be part of the educational model.

### **7.2.2.3 Lack of teaching tools**

Another major workplace related barrier found by this study is the lack of teaching tools for patient education. Falvo (2011, p. 46) defines teaching in terms of patient education as a synonym for patient education itself, as both reflect the shape of “learning”, and “learning can be defined as knowledge acquisition, changes of attitude, skills acquisition, or behaviour change”. This means a lack of teaching tools equates to a lack of tools that can help hospital nurses to provide patients with knowledge, skills and ability for better behaviours and attitudes in the course of health education practice. This finding matches Aghakhani et al. (2012), as they too found it to be a major barrier; Fitzpatrick & Hyde (2005) describe it as frustrating while Lahl et al. (2013) found it was frequently encountered. Bastable (2006) agrees and mentions that there is no single method that works appropriately for all learning experiences due to the needs of different learners; hence, there is a need to learn different learning methods in order to select the ideal method for each learner. In addition, Falvo (2011) believes that teaching resources are a responsibility of specialized nurse education, but that does not prevent nurses being knowledgeable in using those resources in order to offer better practice in health education. The WHO’s (2008) view is that national health authorities, such as the Saudi MOH, are responsible for ensuring available resources include educational methods to support patient engagement with education and offer patient-centred standards. Such access to resources and teaching methods will, according to White (2005), increase nurses’ self-esteem as it will provide them with sources and methods to do their tasks better and more easily.

Other literature discusses the impact and importance of a lack of teaching resources on health education. Frazee et al. (2010) argue with Aghakhani et al. (2012) and Fitzpatrick & Hyde (2005) as they consider that the availability or absence of educational materials is not an important point; rather, it is about nurses' understanding of those resources in order to identify them appropriately and gain the maximum benefit from the available workplace materials and resources. Also, Cashins et al. (2009) found that although teaching tools were available to nurses, they were unaware about how to use them.

This debate can conclude that proper nursing training in how to use and select teaching tools is a priority before providing teaching tools. This conclusion is supported by another finding of this study, related to learning needs, which shows that the appropriate selection of learning strategies is perceived to be highly important for health education as there is a low confidence level in it among nurses. In addition, in 2010 the National Commission for Health Education Credentials (NCHEC), set areas of responsibilities, competencies and sub-competencies for health education specialists (NCHEC, 2014). This guide mentions that part of the assessment to be a specialised educator involves knowing and learning how to identify, assess and select appropriate tools and resources for health education (NCHEC, 2010). Many international universities, such as Deakin (Deakin University, 2014), Wisconsin-La Crosse (Wisconsin-La Crosse, 2014) and Kaplan (Kaplan University, 2014), use such guidance to teach healthcare professionals on pre- and post-health-education courses. Hence, this subject knowledge must be part of hospital nurses' training in health education.

The appropriate selection of learning strategies is a difficult subject to learn. Chio et al. (2010) found that student nurses' were challenged by selecting appropriate learning strategies to provide patient education. Also, Murphy & Hallinger (1987) mention that there is need to know the five dominions of learning in order to select appropriate teaching methods. Those include verbal information, intellectual skills, cognitive strategies, attitudes and motor skills. Freda (2002) on the other hand, believes that different teaching tools are very important for cultural sensitivity in nursing care as many research studies have found that the teaching tools used for one culture may not be effective with a different ethnic or cultural group. Scare tactics are often avoided by

health educators as they have little effectiveness, but they were found to be very effective with the Vietnamese because their belief system includes a strong requirement to visualize the results of diseases (Freda, 2002). Therefore, selecting appropriate methods is an important subject but it can be difficult to learn, though it would help to deal with the barrier of a lack of teaching tools. This means the model can use another subject, learning needs, to deal with another workplace barrier.

### **7.2.2. Education related barriers**

Multiple educational barriers are identified by this study; some relate to nursing education, such as a lack of patient education in clinical nursing programmes and a lack of language consistency in nurses' health education. Other education barriers after employment include: a lack of training and continuous medical education; the lack of a good educational environment; the lack of language consistency in nurses' health education. Also, there is a lack of interest in learning or providing health education from the nurses themselves. There are two other findings that could be used to deal with some of those barriers. Those include: the need for in-service training and prioritizing health education as a primary role.

The inadequate and insufficient education of nurses in health education was found to be a major factor contributing to nurses' reluctance to conduct health education. Similar findings are reported by other studies (Avsar & Kasikçi, 2011; Casey, 2007b; Furber, 2000; Ivarsson & Nilsson, 2009; Kelley & Abraham, 2007; Lee & Chien, 2002). The combined presence of all those educational barriers simply indicates that nurses are educationally unprepared for health education, a similar conclusion was drawn by Rankin et al. (2006). To deal with those barriers, and despite the demands of participants, the results themselves indicate that in-service training is a required, especially as the study intends to create competent nurses by designing a culturally sensitive education model.

Several studies (Choi et al., 2010; Demir et al., 2009; Jones et al., 2011b; Lamiani & Furey, 2009; Pisal, et al., 2011) have designed educational programmes based on in-service training to prepare nurses for health education, and all those studies succeeded in develop the nurses' role and building a feeling of competency among nurses as

patient educators. Kelo (2013) believes that this training should be empowering and enhance overall health education practice. Hence, it is possible to lower this barrier by providing more sufficient and appropriate training opportunities for health education. Such training must be organized in a way that ensures nurses' involvement in such intervention (Tse & So, 2008).

In addition, giving priority to health education would be a useful strategy to develop culturally sensitive health education, as found by this study, and it would be useful to resolve training inadequacies and problems of insufficiency as this could increase nurses' interest in learning or providing health education. Frankish et al. (2006) found that prioritizing health promotion practice can influence workplace organization; as a result, this reflects a development in nursing practice for health promotion. Moronkola & Ojedokunm (2002) dispute this and mention that despite prioritizing health education, training is a personal issue and a nurse's responsibility, and nurses must themselves seek to learn the skills and capabilities they need for health education. Both Nolana et al. (2000) and Park (2005) argue against Moronkola & Ojedokunm (2002) and have the view that the massive demands for knowledge and skills cannot be acquired by nurses alone without giving health education the priority it deserves in nursing work as it has a role to play in staff development. Also, even when nurses get enough training, the health education provided may become inactive without giving health education the priority it deserves within the nursing profession (Nolana et al., 2000; Park, 2005).

Mentioning the importance of strategies without taking action to implant them is not enough to support cultural competency in health education. Prioritizing nursing care simply means policy development. Policy development is the primary responsibility of policymakers in health authorities. Douglas et al. (2011) mentioned that standards of practice, policy and professional development for culturally competent nursing care have to be regularly developed and updated by departments of health and policymakers in support of staff nurses in reports and updates of health priorities. The WHO (2014) adds that health policy controls and redefines the future of healthcare vision for the short and medium term, reprioritizes health targets and relates to the expected roles of different groups. The NPPM (MOH, 2011) and the Saudi MOH strategic plan (MOH, 2012) agree about the importance of this but know there is a need to have policies for

staff training. The policy states, “there is a need to set up medical education programmes that are consistent with MOH professionals’ needs and updated to ensure the provision of updated services for healthcare needs” (MOH, 2012, p.105, p.171). Hence, reprioritizing health education in a way that reflects the MOH and WHO’s visions of health policy is required. Therefore, whenever there is a lack of training, prioritizing health education is also required to hasten nursing development in health education, and this simple idea must be considered in the model design. Hence, one more identified and recommended strategy can be used to resolve an identified barrier.

### **7.3. Learning needs in health education**

The previous section about barriers to health education indicates that there is a real need for proper education/training in health education. It indicates that it is possible to manage some barriers to health education using learning needs, such as knowledge of time management, the appropriate selection of learning strategies, the Arabic and English languages, means of communication and communication skills, and even active listening skills can help. There is a much wide range of learning needs in knowledge and health education skills that are needed to achieve cultural competency in health education for hospital nurses.

#### ***7.3.1 Required skills for health education***

To conduct the discussion in this section appropriately, it is important to clarify the meaning of a skill. The researcher found no clear definition for a skill, there are arguments about its meaning. The WHO (2001, p. 8) defines skills as "abilities that enable people to carry out specific behaviours", meaning skills do not necessarily require training or are acquired through experience. The Free Dictionary (2012, p.1) however, defines skill as "Proficiency, facility, or dexterity that is acquired or developed through training or experience", meaning skill acquired through training or experience. Similar to health education skills, Timmy (2009, pp. 12-15) considers that "health education skills are within contemporary nursing skills; those skills include: assessment, caring, comforting and counselling. Counselling skills include communicating, active listening, exchange of information, providing health teaching, and emotional support all of which are educational activities." Kagan & Evans (2001,



pp.1-3) strongly argue that there should not be a mix of nurses specializing in a specific function and nurses who are using specialized skills for specific functions such as counselling.

Going back to the study findings, the results show that almost all the measured skills are highly important with different levels of confidence in those skills among nurses. Those include: active listening, problem-solving, coordination, social interaction and perceptiveness, the appropriate selection of learning strategies, time management, critical thinking and communication. Only critical thinking was perceived to be a moderately important skill, while active listening, the appropriate selection of learning strategies, time management and communication were discussed previously, as they have roles to play in decreasing the barriers to health education. The following sections will focus on the remaining skills, which include: critical thinking, problem-solving and coordination, social interaction and perceptiveness.

#### **7.3.1.1. Problem solving**

Another perceived important skill of health education with a low confidence level among nurses is problem-solving skills. Regarding the importance of problem-solving skills, a similar finding was reported by Altun (2003) who found that student nurses value problem-solving skills. Training nurses in problem-solving skills is recommended by Heidari and Shahbazi (2014), who found that such training positively affects students' decision-making skills and thus is recommended for health education practice. Choi et al. (2010) found that knowledge alone is not sufficient to provide appropriate culturally sensitive health education; the study concluded that it is important for nurses to be armed with problem-solving skills to deal with health education problems regarding cultural values that hinder the provision of education. This finding is congruent with Nolan et al. (2001). This skill would be very important, especially in Saudi Arabia, which is full of particular cultural values and beliefs, and such skills, would be useful to be learned despite, whether learned for health education or for general nursing practice.

On the other hand, there is a low confidence level for problem solving skills among nurses; a similar result was reported by Altun (2003) who found that student nurses in

the nursing department considered themselves to be less accomplished in their problem solving ability. Altun concluded that education should help nurses to reach the desired level of problem solving skills by allowing them to acquire capabilities such as self-awareness and being inquisitive. As a result of this training, and according to Valente et al. (2008) and White (2005), there will be an increase in the confidence and self-esteem of trainees due to increased knowledge, especially in situational analysis and the creation of solutions.

May et al. (2006), however, argue that training that aims to improve knowledge in problem-solving skills does not necessarily lead to improved problem-solving skills even if it is perceived as important for patient education. May et al. (2006) concluded that there is a need to incorporate more active learning strategies or contextually based strategies within patient education programmes to facilitate the transfer of knowledge within real-life situations of patient education. The Saudi NPPM does mention the need to “Identify strengths and weaknesses of the orienteers, including problem solving and critical thinking skills” (MOH, 2011, p.13), but this policy does not clarify why, how and for what to use such skills or whether by staff nurses or nurse managers. Therefore, this researcher believes there is a need to use the approach mentioned by May et al. (2006) which is to have a mix of development strategies and learning needs, and to develop nursing policies to meet this approach.

### ***7.3.1.2 Coordination***

Another skill perceived to be important and with low confidence level is coordination. No studies were found that measure nurses' confidence level in coordination though the importance of coordination skills was noted by Bajracharya (1999). Falvo (2011) agrees and mentions that coordination is an important skill to be learnt to prevent the duplication of educational activities and effort and to reinforce consistent information and health education, which require teamwork. While the study results indicate that coordination should be part of the learning model of health education, there are, however, some conflicting opinions that may oppose this opinion.

A concern is that this researcher noticed that some studies (Burton et al., 2011; Farahani et al., 2011; Jones et al., 2011a) reported difficulty in coordination, which

may or may not be the reason behind the lack of confidence in coordination skills. In addition, and despite its importance, it is not a skill commonly used by nurses or other healthcare professionals (Bastable, 2005; Burton et al., 2011), which may indicate that it is an unimportant skill or that nurses are unable to use coordination skills for one reason or another. Moreover, the Joint Commission for the Accreditation of Healthcare Organizations (JCAHO) considers that the coordination of health education is in part the responsibility of a hospital's plan and not the responsibility of nurses (Freda, 2002). Additionally, there is a difference between the role of the Health Education Coordinator and what nurses are able to do regarding patient education coordination, especially if nurses consider it an important skill that they need to learn. The policy (SNR-DHR, p. 8) of the NPPM (MOH, 2011) states that "the nurse must coordinate with physicians and other healthcare professionals regarding the plan for patient education". Hence, considering the study findings and the previous points of concern, it may be better to consider coordination as learning and part of the nurses' educational model, given that coordination requires coordination with other healthcare workers such as the Health Education Coordinator.

### ***7.3.1.3 Critical thinking***

Critical thinking within the context of nurses' education in health education is challenging for several reasons. This is primarily due to the study findings, which found that critical thinking is perceived to be moderately important and with a low competence level among nurses. Regarding the low confidence in critical thinking, a similar result was reported by Harvard-Hinchberger (2006) who found that despite student nurses being highly motivated by health promotion's critical thinking training, the majority had little or no prior skills in formal proposal writing which is covered by training. Also, students had difficulty in communicating their ideas and their critical writing skills remained poor.

There are several benefits of training nurses in critical thinking. Lum (2011) believes that such skills may provide healthcare practitioners with the knowledge and practice needed to achieve culture competency. In addition, Paul (1992) adds that the benefits of teaching critical thinking for learners include: the abilities to analyze, formulate and solve problems and to accumulate new theoretical knowledge that can be used to

inform actions for implementing cultural care practices in culturally diverse communities. Lunney and NANDA International (2009) mention that critical thinking training leads to positive outcomes for nursing care and equips nurses with flexibility, creativity, open-mindedness and reasoning analysis abilities, which make nurses more self-confident.

On the other hand, there are challenges to teaching critical thinking, and most of them relate to teachers. In addition, Blondy (2007, p. 52) summarises several barriers to teaching critical thinking to nurses which include: a lack of knowledge as to what critical thinking is; pressure on educators to teach content; resistance of educators to change their teaching style; difficulty in synthesizing critical thinking skills into existing course content; educators' fear of failing in their efforts to construct a successful model to teach critical thinking; a lack of appropriate resources, such as time to plan, learn and teach critical thinking strategies. Lum (2011) discusses the role of critical thinking skills in cultural competency and agrees that these are difficult skills to learn as there is some theoretical background that needs to be understood to appreciate the implications of having such skills. Also such training, according to Paul (1992), has to cover both general practical training lessons that influence critical thinking abilities in addition to specific-discipline courses. In addition, and unfortunately, at the level of the Nursing Policy and Procedures Manual, the policy (GNR-07-02-5.2.5.2.2) for nursing orientation states that a responsibility of the education department during the orientation phase is to "Identify the strengths and weaknesses of orienteers, including problem solving and critical thinking skills" (MOH, 2011, p.13), but the policy mentions nothing about training nurses in both skills.

Therefore, to develop health education, the policymakers at the MOH may first have to update their nursing policy to ensure that despite the challenges for critical thinking training, it can at least be considered a secondary training skill, due to its moderate importance for hospital nurses, and also part of the model's learning content. This researcher acknowledges that it may be similar to other skills such as coordination and selecting learning strategies which are all indicated as being difficult skills to learn.

Therefore, to sum up, several primary skills are required for health education practice. The top priority vis-à-vis training for hospital nurses includes: coordination, selecting learning strategies, active listening, problem solving, time management and communication. Secondary skills include critical thinking. Skills alone are not sufficient to build a culturally sensitive health education model. Several studies (Betancourt et al., 2003; Chipps et al., 2008; Pecukonis et al., 2008; Wright, 2008) have designed and produced training courses in order to have culturally competent healthcare professionals, and those researchers believe that cultural competency training must also be accompanied by learning knowledge about survival subjects. This is also agreed with by this study, and the following section indicates the accuracy of the previous conclusion.

### **7.3.2. Required subjects of knowledge for the health education of hospital nurses**

Knowledge must be a basic domain of a practice-based, culturally sensitive health education model. To understand its role, the definition of knowledge should be clarified. There are various definitions of knowledge; most of those provided by online dictionaries indicate that they are similar regarding the role of experience and education to gain knowledge. O\*NET (2010) defines knowledge as "sets of facts and principles needed to address problems and issues that are part of a job", while the Oxford University Press (2014) defines knowledge as the "familiarity, awareness or understanding of someone or something such as information, facts, descriptions or skills which are acquired thorough experiences or education by perceiving, discovering or learning. It can refer to a theoretical or practical understanding of a subject."

Regarding knowledge of health education, Wilhelmsson & Lindberg (2009) divide knowledge into two categories: knowledge and deeper knowledge. Knowledge which is described as specialization means that nurses have had further education and consequently been given responsibility for specialized nursing activities such as patient education. Deeper knowledge refers to further education that gives nurses knowledge and competence, which provides them with the tools to succeed in health promotion. Therefore, according to Baartman & de-Bruijn (2011), to achieve competence in health education, knowledge must be a basic element that can be acquired via training or experience.

From the study results, the following subjects of knowledge were perceived to be important: knowledge of education/ teaching/ instruction; the English and Arabic languages; knowledge of the means of communication; basic knowledge of human psychology; counselling; basic administration and management; basic knowledge of sociology and culture. Knowledge of the English and Arabic languages and of the means of communication were discussed previously.

### **7.3.2.1. Knowledge of Education/ Instruction/ Teaching**

Looking back of the study results, all subjects of knowledge measured by the study reported high levels of importance for health education practice. This finding is generally similar to previous studies regarding the importance of similar subjects of knowledge. For knowledge of education/ instruction/ teaching, which is perceived as highly important, similar findings were reported by Priharjo & Hoy (2011) who found that learning teaching is a highly relevant issue to nurses' learning needs for health education. Lamiani & Furey (2009) mention that training in patient teaching helps nurses to be prepared for patient education. In addition, Bernhardt and Hubley (2001) and Wingard (2005) mention that teaching health education requires knowledgeable and skilled nurses, not only to do it correctly, but also to achieve the correct quality of teaching content from trusted sources of information. Rankin et al. (2005, p. 98) add that educators' knowledge of teaching principles can help in making better education and help to deal with the impact on patients' behaviour changes.

For planning a health education project, such as this study's aim, various content related to teaching skills has to be considered. The principals of health education, learning theories and an evidence base, with inspiration from sociology, psychology and communication, should all be considered (Grabowski et al., 2012). This should cover two strands: practical and theoretical teaching knowledge. Theoretical knowledge includes: principles of adult learning, effective learning-based evidence-based findings (Jones et al., 2011a), a patient-centred model of education (Lamiani & Furey, 2009). This content, according to Bastable (2008), will provide nurses with the basic knowledge they need so that they have the knowledge to choose the most useful formula for a learning approach, while the consideration of evidence-based findings to

build educational programmes, as in this study, will provide confidence in the most appropriate approach for educational intervention (Braungart & Braungart, 2007). In addition, a patient-centred approach is recommended. Stewart (2003, pp. 108-09) mentions that his approach is integral and that he shares decisions with the patient regarding educational needs. This is useful for health education experience as it focuses on communication, which is used in the study; however, this approach still requires more knowledge about adult learning principles, which are not considered.

The previous teaching approaches might not be enough to equip nurses to teach effectively within the Saudi community, as this may require a mixture of religious, cultural principles and psychological learning, all of which pose challenges. Both El-Gilany & Al-Wehady (2008) and Rassool (2000) recommend using some Islamic beliefs that could be useful as health education tools. Rawas et al. (2012) view this idea as difficult and believe most attention should be focused on Saudi culture because Saudis strongly consider and respect their culture more than their religion. Meanwhile Harriers et al.'s (2008) view is that such educational experience requires effective psychological learning theories that work to produce the desired outcomes. Both Hutchinson (2007) and Pinto and Flord (2008) consider that no single learning approach can deal with all learning conditions, and designing a health education is a challenge in the face of such problems. Therefore, teaching hospital nurses how to teach is important and has to be part of the educational model, but this requires wide-ranging content to ensure effectiveness in complex cultures such as Saudi Arabian culture.

### ***7.3.2.2. Knowledge of Counselling***

Counselling is another important subject of health education knowledge identified by this study. Lipponen et al. (2006) describe similar findings and report the importance of a positive attitude towards counselling. Also, Pfister-Minogue and Salveson (2010) found that training in counselling helps nurses to realize the importance of and improve their communication skills to facilitate patients' behaviour changes, and nurses believe that additional practical training techniques for typical patient situations would help them to improve their skills and confidence in using this method. In addition, counselling was found to reduce perceived interaction difficulties for nursing staff

dealing with patients, families and co-workers (Arranz et al., 2005). Some studies about counselling on specific health issues, such as sexual counselling, found this to be part of the nursing role though not often conducted by nurses (Vassiliadou et al., 2008), and similar results are reported by Goldstein et al. (1987) for smoking. Both studies (Goldstein et al., 1987; Vassiliadou et al., 2008) found that nurses do not know how to do counselling due to a lack of sufficient educational preparation and thus they lack confidence, which is similar to this study's findings regarding the lack of confidence in counselling.

The challenge is how to train nurses to be good counsellors and achieve cultural competency in health education and this could be another difficult subject to learn. Pérez and Luquis (2008) mention that three dimensions of counselling learning must be included: identification of the locus of problem etiology, which often varies from one culture to another; acculturation which reflects the numerous relations or interactions that exist when two cultures meet, those should be known and understood; and the goal of counselling which can vary between facilitating decision-making, prevention or problem-solving. Given the advantages of counselling, which include communicating, active listening and the exchange of information (Timmy, 2009), conducting counselling training may indirectly help to improve other skills required for health education, such as communication, coordination, active listening and social interaction skills. Therefore, counselling should remain as a part of nursing education in health education. The policies for both hospital nursing education (GNR-07-01) and the nursing orientation phase (GNR-07-02) of the Saudi Nursing Policy and Procedures Manual neglect training nurses in counselling skills. This means further action from the Saudi General Directorate of Nursing is required to update both policies to include counselling training in the Nursing Policy and Procedures manual.

### ***7.3.2.3. Basic knowledge of human psychology***

Also, this study has found that basic knowledge of human psychology is also very important. Several studies and publications have highlighted the importance of psychology in health promotion and health education. Shoqirat (2014) found that psychology is a basic element of health promotion but it is often neglected due to a lack of time, and Evans (2013) highlights its importance in promoting sexual health.



There are implications from human psychology for health education. Burns (1991) and Stephenson (2006) both mention that human psychology has many implications for health education, such as dealing with the presence of anxiety, and during education, such as dealing with patients not being willing to undergo education, and after education, such as patient satisfaction, all of which are factors perceived as barriers to health education by this study (My Study). Additionally, hospital healthcare providers have to take care of patients during severe health conditions and deal with their moods and behaviours. Also there are times when physical illness leads to mental disturbance, and in such cases nurses have to be compassionate and understanding (Burns, 1991; Stephenson, 2006).

On the other hand, training to provide basic knowledge of psychology is also important. Both Burns (1991, pp. 269-71) and Rankin et al. (2005, pp. 211-212) believe that healthcare professionals as patient educators must be trained in or have some basic knowledge of psychology so that they can support patients emotionally by addressing mental changes. This training should provide nurses with the knowledge and skills they need. In addition, Traeger et al. (2013) found that psychological skills training for managing difficult encounters is both feasible and acceptable and offers potential benefits in reducing emotional exhaustion and stress. This means that, practically, this subject of knowledge should help in the delivery of health education practice, especially as this study has found that the existence of anxiety and pain in a patient act as a barrier to the delivery of health education, and so this training could help nurses to deal with these barriers. Therefore, it has to be part of a practice-based model, but before that the policies for Continuous Nursing Education of the NPPM (GNR-07-01) and the nursing orientation phase (GNR-07-02) have to be updated to ensure training in basic knowledge of human psychology is part of both periods of nursing training.

#### ***7.3.2.4 Basic knowledge of sociology and culture***

This subject of knowledge is one of the most important ones, not because it is perceived to be highly important for health education, but to achieve practice-based culturally sensitive health education as per this study's aim. While no studies were

found that measured the importance of basic knowledge of sociology and culture for health education, as in this study, several authors and publications have highlighted the importance of nurses having basic knowledge of sociology (e.g. Clement, 2010; Green & Earle, 2009; Pinikahana, 2003) and cultural knowledge for health education purposes (e.g. Beagley, 2011; Burge & Fair, 2003; Irvine, 2005; Zou & Parry, 2012).

To explain this importance, Green & Earle (2009, p.29) explain two concepts with implications for nursing, i.e. "sociology in nursing" and "sociology of nursing". 'Sociology in nursing' refers to the use or application of sociology, sociological studies or analysis to improve the core or essence of individual healthcare practice or services, regardless of whether this application is made used of by patients or healthcare workers. On the other hand, the sociology of nursing refers to all the other social factors that affect the nursing profession, such as its occupational status or recruitment and attrition problems (Green & Earle, 2009). Hence, to ensure the provision of culturally sensitive health education, nurses are expected to be knowledgeable and aware of economic, social and cultural issues, social and health policies and their influence on health behaviour (Burge & Fair, 2003; Majumdar et al., 2004; Irvine, 2005).

In addition, promoting health in multicultural populations such as that in Saudi Arabia is difficult due to the various cultural, linguistic, health literacy and socio-economic barriers (Zou & Parry, 2012). Therefore, according to Green & Earle (2009), the basics of sociology are present within the daily work of the nursing profession which puts it squarely within a social context rather than considering it in isolation. Pinikahana (2003) agrees with this importance but argues that this is only true if sociology is applied to nursing. Due the strong impact of culture on nursing, and unlike the previous skills and subjects of knowledge of health education, the policy for nursing orientation (GNR-07-02-page 24) states that "the purpose of orientation policy is to facilitate the integration of newly employed nursing staff into the role and responsibilities in the work setting, this includes: policies, procedures and unit standards, the culture and norms of their patients and the work place" (MOH, 2011). Hence, it is reasonable for the desired educational model to consider this subject of knowledge; especially, the following section will show examples of complex Saudi

cultural norms which require full cultural knowledge and basic sociological knowledge to deal with them.

#### ***7.3.2.5. Comprehensive subjects of knowledge and skills for health education***

In addition to the previous qualitative findings about the subjects of knowledge and skills required for health education, one of the interesting findings added by this study is that nurses are in need of comprehensive knowledge of health education in order to provide culturally competent health education. This finding, however, has two meanings. This additional finding could indirectly revalidate the previous study results, which indicated that all the measured subjects of knowledge and most of the measured skills were perceived to be important. In addition, this finding is similar to that of Irvine (2005) who determined what competencies district nurses who wish to have an effective role in health promotion require. Irvine found that eight subjects of knowledge were identified as important to ensure competence in health promotion: knowledge of lifestyle and behaviour changes, health promotion theories, the social sciences, education/ learning theories, computer literacy, team working, disease processes and epidemiology. These reflect the majority of subjects measured in this study.

Moreover, the research has previously reported, in the qualitative interview analysis, that when nurses were answering direct questions to list the required subjects of knowledge and skills by talking about barriers to health education, even the researcher was using "please explain, list for me" to ensure accurate interpretation of their interviews. This made the researcher feel and conclude that the participant nurses did not really know what was required for health education due to a lack of training and education in health education, meaning they did not have sufficient background knowledge of health education to list the required knowledge and skills for health education. As a result, they used phrases leading to this finding, indicating that they are "in need of comprehensive knowledge of health education".

On the other hand, this finding could also mean that as health education is a complex concept that covers environmental, physical, social, emotional and intellectual areas, and spiritual health issues for patients, families, groups and communities (Robert,

2002; Donatelle, 2009), it may require other subjects of knowledge and skills beyond those measured by this study. Considering validity and reliability considerations, this concern may not be true, but it has to be mentioned. Even if there are subjects other than those tested by this study, it may be better not to use them unless they are evidentially proven to be effective for health education. In addition, it is important to remember that the findings also indicate a lack of training of nurse instructors; hence, it is important to ensure that trainers of the trainers of health education are knowledgeable, well trained to train staff nurses about the previously discussed skills and subjects of knowledge of health education.

#### **7.4.Strategies to develop culturally sensitive health education**

##### ***7.4.1 General recommended strategies***

The study findings provide guidance about strategies that would be helpful to develop cultural sensitivity in health education. The strategies focus on three dimensions: general strategies, gender segregation and a multicultural nursing workforce. The general recommended strategies include: using media which was previously discussed in relation to the cultural barrier of nursing acceptance in the community and the gender segregation cultural value; making health education a priority within nursing policy, which was also discussed previously in relation to the educational barrier; using Islamic health beliefs to encourage healthy behaviour.

Both Chapter Two about the meaning of cultural sensitivity and the literature review have discussed the importance of health beliefs in health education. To understand why using Islamic health beliefs to encourage healthy behaviour would be a useful strategy, especially in Saudi Arabia, it is necessary to provide a brief summary about life in Saudi Arabia. Saudi Arabia officially considers itself an Islamic country. The doctrine and beliefs of Islam are reflected in all aspects of life in Saudi Arabia and include: future educational, social, economic and political developments (Aldossary et al., 2008; Littlewood & Yousuf, 2000), nutrition and food, behaviour, language and healthcare practice (El-Gilany & Al-Wehady, 2008).

In addition, Islam is full of health beliefs and health instructions. Several studies and publications (Aldossary et al., 2008; Allegranzi et al., 2009; Al-Shahri, 2002; El-Gilany & Al-Wehady, 2008; Rassool 2000) mention examples of Islamic health

instructions and beliefs such as eating moderately, taking exercise regularly, personal hygiene and cleanliness, abstaining from the use of alcohol and tobacco, and sexual instructions relating to circumcision, productivity and sexual intercourse. Unfortunately, no studies were found that examine the role of Islamic health beliefs in health education, though Allegranzi et al. (2009) found that religious faith and culture can strongly influence the hand hygiene behaviour of healthcare workers and potentially affect compliance with best practices. Therefore, as the majority of Saudis strongly believe in Islam, some literature (Allegranzi et al., 2009; Rassool, 2000; El-Gilany & Al-Wehady, 2008) believes that religious health beliefs can be strong and useful health education tools.

To ensure such health messages are distributed widely, the Saudi Ministry of Islamic Affairs, which is responsible for mosque administration and clergy roles, can help with this issue. It can send memos to mosques and clergy to talk about and disseminate health messages using Islamic health beliefs, especially during weekly Jum`ah Prayers (every Friday), which are congregational prayers that must be attended by all Muslims. This provides an opportunity to distribute health education and promotional messages to large numbers of people. As a result, that may decrease the pressure on demands for health education from hospital nurses or other healthcare departments. Unfortunately, even the MOH strategic plan omits these important findings, hence there is a need to update nursing polices and future strategic plans to ensure there are benefits from Islamic health beliefs for Saudis. Hence, this strategy must be used in the practice-based culturally sensitive model for hospital nurses.

#### ***7.4.2 Developing a multicultural nursing workforce***

The last part of this section is about developing a multicultural nursing workforce. Two suggested strategies agreed by the participants could be very useful. They include offering expatriate nurses Arabic and cultural training courses, which was previously discussed as part of learning needs. Cultural training has to be in Saudi Arabia. Rooyen et al. (2010) has found even expatriate nurses who had had cross-cultural training in their own countries before taking up employment in Saudi Arabia felt they were not adequately prepared for the realities of the Saudi general cultural environment and thus

faced many unexpected working and cultural problems e.g. the general cultural environment, cultural norms of gender segregation, extensive further education and competencies that are required during the orientation period for nursing practice in Saudi Arabia. Transcribing medication is forbidden for South African nurses during their nursing training in South Africa, while in Saudi Arabia, hospitals requires nurses to transcribe medication; this creates a moral dilemma in which nurses find themselves and they experience much anxiety and inner turmoil. Marrone (1999) states that due to the diversity in culture, education and practice backgrounds of nursing staff, this poses unique challenges to designing systems to ensure that standards of care for patients and standards of performance for nurses are met consistently. Hence, to provide cultural sensitivity in nursing care, nurses require specially designed educational programmes and interactive learning activities, including Arabic language lessons, nursing in Saudi culture, transcultural nursing in an Islamic society, Saudi and Islamic legal and ethical issues, personal adjustment and transitional adjustment.

Another recommended strategy is more involvement of the expatriate nurses in decision-making. The sharing of cultural knowledge is also needed. The strategy of assigning nurses from different countries to work with Saudi nurses on each shift to learn from each other would be very useful, especially for a multicultural nursing workforce. Two studies have proved the effectiveness of this strategy (Aboul-Enein, 2002; Bozionelos, 2009). Bozionelos (2009) found that multicultural expatriate nurses in Saudi Arabia need the support of mentors or peers to deal with cultural adaptation and patients' cultural care problems. Aboul-Enein (2002) validates that Saudi and expatriate nurses learn from each other, and expatriate nurses with help from their Saudi colleagues succeed in providing culturally competent nursing care, even for Saudi patients. Hence, consideration of this strategy would help in achieving cultural sensitivity in health education.

## **7.5 Conclusion**

To plan for a practice-based culturally sensitive health education model, three dimensions must be considered as these interact with each other: workplace conditions, education and training, and culture. The workplace conditions mainly reflect what is

presented by the findings, i.e. that barriers can be cultural, educational and workplace related. These required actions to lower or remove them. In addition, nurses require a wide range of knowledge and skills and most of those subjects seem to be difficult to learn. The required educational needs can help nurses to become competent in the practice of health education and can help to solve and lower barriers in the workplace. Also, several supportive strategies are required to achieve cultural sensitivity. Some can be directly used by nurses, such as using Islamic health beliefs to influence health behaviours. Some other strategies, such as using media, reprioritizing health education to be a primary nursing function and working with other organizations, need help from religious leaders. These strategies require action from outside hospitals, such as from the Saudi Ministry of Health and other organizations such as the Ministry of Islamic Affairs. This means that based on the required actions, the final model needs internal and external contributions.

## **Chapter 8. The Model**

### **8.1 Introduction**

This chapter complements the previous chapter. The previous chapter discussed the findings of the study. This chapter presents the final model design, it uses the summary of findings, theoretical assumptions about health education and cultural competency and studies that provide training courses and preparatory programmes to justify the model's design. In addition, this chapter explains the factors that influence the model's design, shape and structure, and parts of the model including the educational curriculum.

### **8.2 The model's form**

The findings of this study indicate that the provision of cultural competency and sensitivity in health education cannot be achieved without accepting that the practice of health education is affected by factors inside the clinical setting, such as nurses' education and working conditions and various barriers. It is also affected by other external factors, such as community roles, cultural values and the updating of nursing policy. Therefore, based on the findings of this study, three main objectives were set for this model as an outcome of the study.

- 1- To train hospital nurses in the knowledge and skills needed for the provision of culturally sensitive practice-based health education in the presence of multiple daily working barriers;
- 2- To guide nursing health authority managers with recommendations and suggested strategies to achieve ideal conditions;
- 3- To provide all the kinds of support needed to provide culturally sensitive/competent health education.

Hence, based on the data findings, literature reviews, concepts that support this study such as health education, cultural sensitivity, practice-based, models, and the study process, the model was designed. The framework of this model consists of two main parts categorized based on the required interventions and recommendations: internal and external dimensions. The history of the process followed to create the model and its final design are summarized in figure 6, and 7 in the following page:



Figure 6 summarises the process history for creating the model

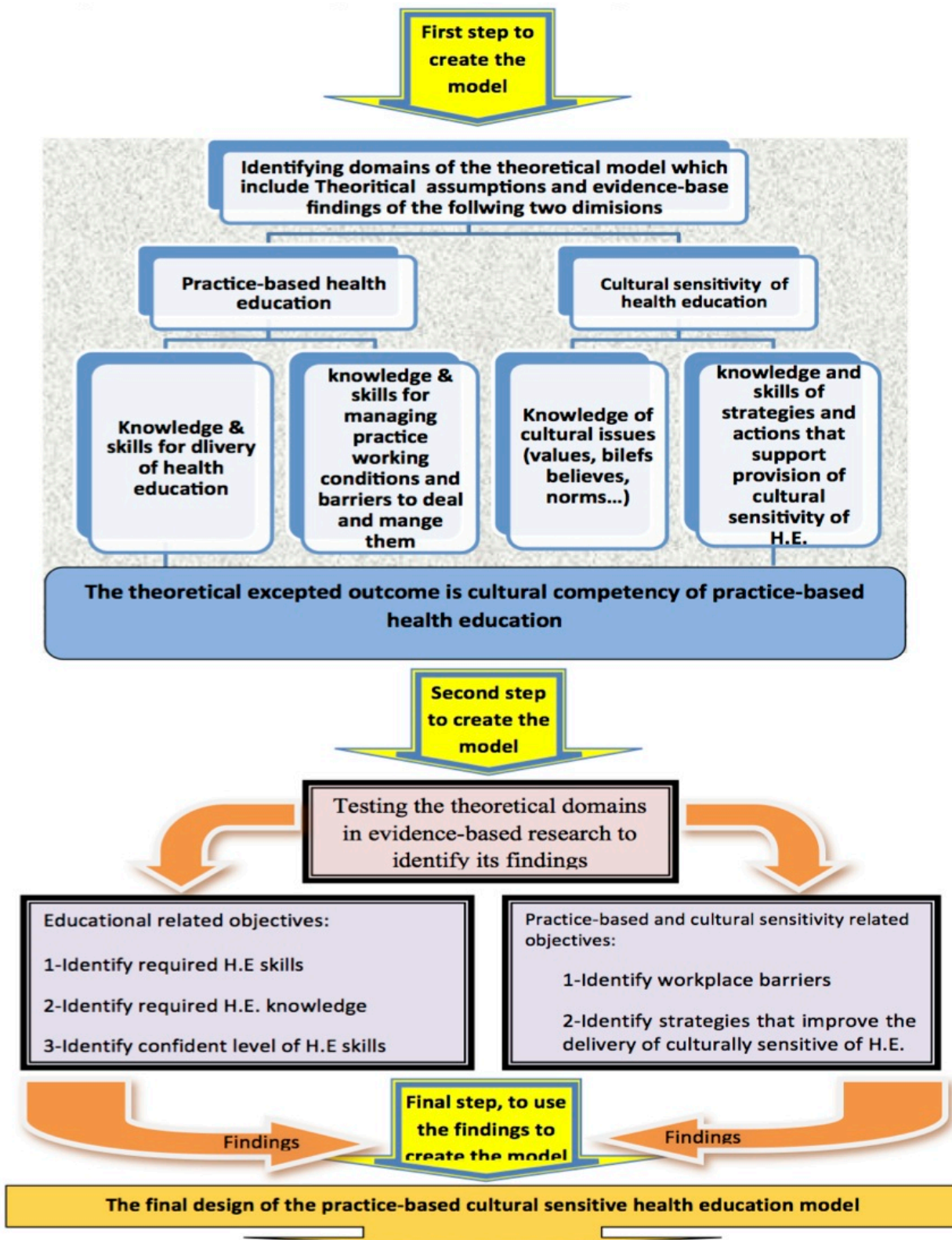
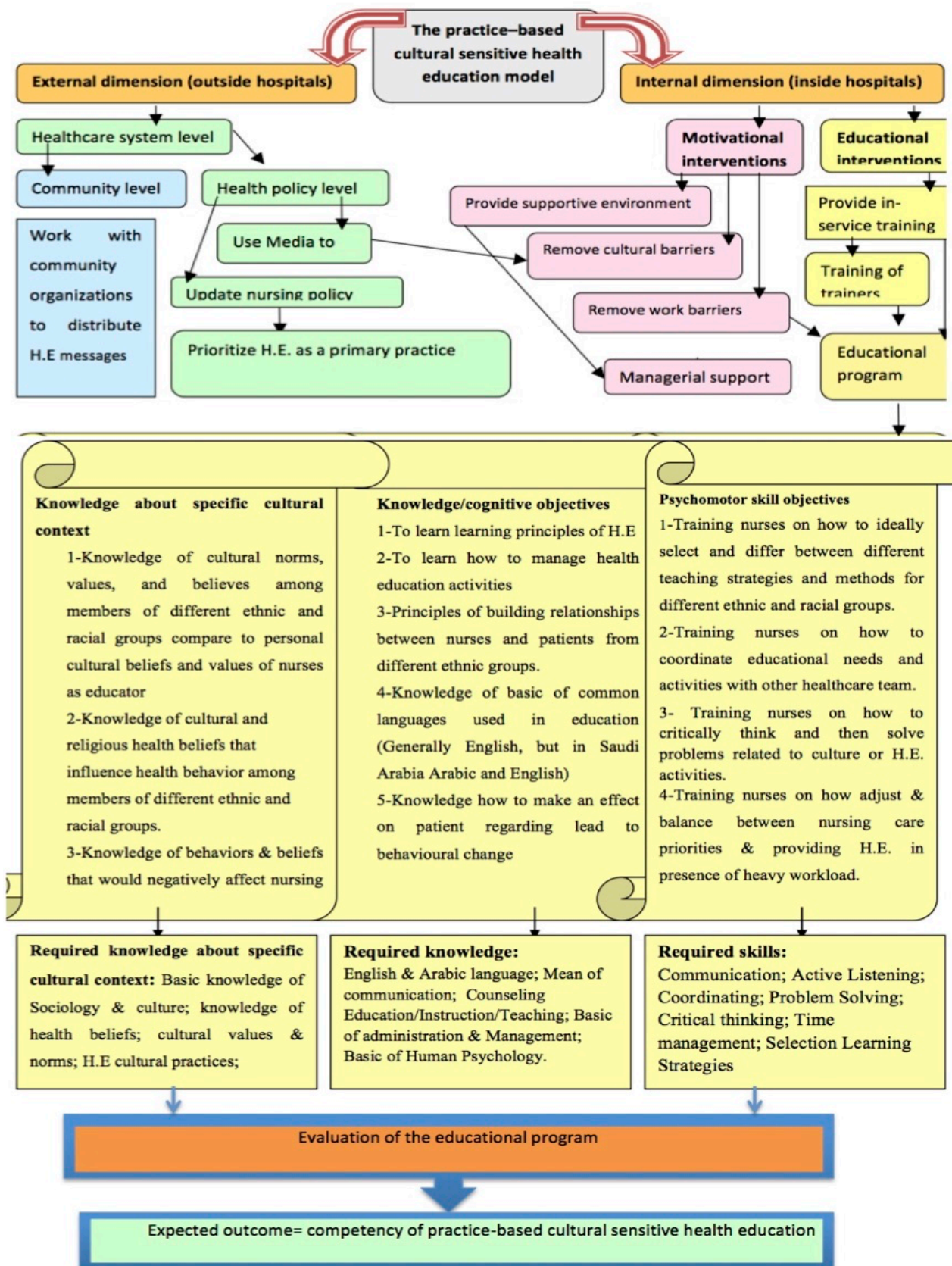


Figure (7) the final model design: practice-based cultural sensitive health education model for hospital nurses



### **8.2.1 The factors influencing model design**

Several factors were used as the basis for this model design. This starts with the theoretical background about practice-based cultural sensitive health education as there is no available model that reflects this study model. In chapter two, the researcher explained theoretical background, concepts and definitions related to practice-based cultural sensitive health education, which provide a conceptual framework for the study. In figure (6), the first step is identifying domains of the theoretical model which include theoretical assumptions and evidence-base findings of both cultural sensitivity and practice-base of health education.

Chapter three about the literature review has discussed the evidence-based findings and the theoretical perspectives of health education and cultural competency in order to identify the themes related to theoretically and evidentially background knowledge of both the cultural sensitivity and practice-base of health education. It was summarized by the presence of three main themes affecting practice-based culturally sensitive health education. Those include: barriers or challenges, learning needs, and cultural issues. The literature used in this study is derived from a systematic search and synthesis of the extant evidence, including emergent evidence about health and health education within nursing in Saudi Arabia and the Middle East context. The expectation however was that those studies should represent evidence under different working roles, policies, and different operating healthcare systems. It is not possible to compare the different working roles, policies and health care because they differ from one country to another and this is proven to affect the practice of health education (Albada et al., 2007).

The Saudi Nursing Policy and Procedural Manual (2011) is congruent with wider recommendations for health education, for example (give a ref) with some relating to cultural issues. The Saudi Nursing Policy and Procedural Manual (2011) has set policy that controls the nursing roles and functions of health education, which are similar to the literature review findings. The Saudi Nursing Policy and Procedure Manual mentioned that health education is the responsibility of all nurses in all nursing departments. In addition, nurses should actively participate in the preparation of the annual health education programmes, and share their opinions about educational

priorities. They should coordinate educational needs and build a good relationship through improved communications with clients. They should report any health and social problems affecting education, and be able to teach and manage the administration of educational activities. These are the same points of the literature review and repeated by the findings of the study. Therefore, the Saudi nursing polices of health education are not far from the international review findings. Therefore, this model can be applied to western countries in consideration of eastern cultural values.

In the previous figure (6), the next step after identifying the evidence-based findings of themes of cultural sensitive health was to test the domains in evidence-based research to identify the implications. Chapter four about the theoretical and conceptual framework has set and justified the study objectives that meet the literature review findings in order to test those three domains, and chapter five about the methodology has set the best methodological approaches and tools to answer the study objectives. Chapter six has presented the findings, and the final step of model creation as shown in figure (6) is to use the findings to create the model, and chapter seven discussed those findings.

Most of the findings reflect factors related to hospital nurses inside hospitals, such as educational needs, barriers, strategies and recommendations that require actions inside hospitals. Also, the findings provide other data related to cultural values and barriers, problems related to health policies which all required actions from outside hospital settings such as from the Saudi Ministry of Health. Therefore, the discussion chapter has concluded as seen in the previous figure (7) that the model consists of two main dimensions including: The internal dimension, and the external dimension. The internal dimension deals with study findings related to the factors inside hospital settings, such as a lack of adequate and sufficient training, barriers to health education. It refers to the interventions required to support or elevate nursing competency of practice-based culturally sensitive health education using the study findings. Hence, The external dimension is about interventions or actions from other personnel or organization outside the hospital setting required to support or elevate nursing competency of practice-based culturally sensitive health education using the study findings.

### **8.3 The Internal dimension.**

There are some interventions that require actions inside hospitals. The findings indicate that there are challenges to continuous nursing education in health education. Those include: lack of quality and effective and sufficient training, some limitations of nurse instructors and lack of training, lack of motivation, the nature of nursing work-related barriers, such as shortages of staff, pressure of workload, and an inappropriate educational environment. Therefore, as shown in figure (7), hospital administrative and managerial personnel need to consider the following steps: more in-service training and continuous medical education using a model educational curriculum, this has to include training of trainers/instructors in nurses' learning needs and usage of a model curriculum, and consideration of motivational interventions that would support the provision of health education by hospital nurses.

This model needs to be an understandable model, with easy implementation, and cost effectiveness, but there are also points of interest that must be mentioned: This starts with training of the trainers before applying of model within educational curricula. This step is strongly recommended, but it may not be possible to implement for financial reasons, therefore, the model also suggests that the nurse manager could educate within the work place guided by the model.

#### ***8.3.1 Training of the trainers***

Figure (7) shows that the first step should begin with but not be limited to training of the trainers. Despite the reported findings about the limitations of instructors and nurse managers, several required skills and subjects of knowledge were reported to be difficult to learn, such as communication knowledge and skills (Chaffee, 2000; Farahani, et al., 2011; Lamiani & Furey, 2009), selecting the appropriate learning strategies (Chio et al., 2010), coordination (Burton et al , 2011; Farahani, et al., 2011; Jones et al., 2011a;), Critical thinking (Lum, 2011), counseling (Pérez & Luquis, 2008), and learning of Arabic language (Nasir & Nasir, 2006).

In addition, health education knowledge and skills could be difficult to teach. While Lamiani & Furey (2009) consider patient education as a skill that can be learned like

other skills, Kittleston, (2009) argue and views that teaching nurses about patient education skills is difficult as those skills are unique, different from one educator to another, and based on the individual's involvement. In addition, the teaching of health/patient education is somehow linked to the teacher's ability of teaching. Redman & NursingConsult, (2007) views that in teaching health education there is relation between teacher ability and learner competency and learner competency. In some cases teacher are in needs to help to develop their teaching skills. This relation was evidently found in Choi et al, (2010) which found that the challenge in providing health education knowledge and skills for nurses is the teaching performance of the teacher nurse.

In addition, the study found that families are part of health education and represent part of it; therefore, the training of trainers has to ensure that trainers teach nurses about this important role of the family in patient education, i.e. to work as secondary learners when the patient is not in a condition to receive education. Therefore, training of the trainers has to be part of the preparation of any health education educational project. The training of the trainers has been applied in (Jones et al., 2011b; Pisal, et al., 2011). The training of the trainer in Jones et al. (2011b) was positively perceived as helpful. Pisal, et al., (2011) views that a large sample size required educators prepared with sufficient knowledge and practice. Assemi et al., (2007) view this step as an effective tool in promoting curriculum adoption, improving faculty knowledge, confidence, impact on subsequent trainees. In addition, other models such as The Therapeutic Patent Education TPE (WHO, 1998) has considered training of teachers of health educators to guide them and to accelerate transformation toward health education among healthcare workers.

Even this strategy could have challenges. The NICE model (2006) is more restricted about training of the trainers. It mentioned the need for rigorous, ongoing training in the principles of education, and educators should be accredited by a nationally recognised procedure. In addition, there the complexities of health education is raised when health education training try to implement the principals of health education in a wide range of related areas covers by health education such as physical, social, emotional, intellectual, and spiritual health which are offered to patients, families, groups and communities (Donatelle, 2009; Robert, 2002; Whitehead, 2004). As a

result, the various focuses of the multiplicity of health education could make it difficult to define the input needed to fulfill the role of the training project. This model wants to be a simple model, easy to implement by nurse instructors or teachers. The resources available could play a role in training of the trainers, therefore, this model suggests training of trainers, in the first instance. However there is also the option of nurse instructors following a clear educational curriculum.

### ***8.3.2 The educational curriculum***

Figure (7) shows that the next step after training the trainers is using the model within the educational curriculum for nurses. Developing an ideal educational curriculum should prepare hospital nurses for the health education that is required based on the study findings, and in consideration of some factors. Perez & Luquis, (2008, p. 167) has mentioned that the strong curriculum must prepare target audiences with the required knowledge, sensitivity, and practical skills needed to deliver health education in a culturally competent manner. Perez & Luquis, (2008) suggested to focus on four main components including: course structures and sequences that promote an integrated approach to cultural competence development, opportunities to examine and apply theories and models within a cultural context throughout the curriculum, experiential learning opportunities specifically designed to expose learners to a variety of multicultural and cross-cultural experiences. On the other hand, Jeffreys' CCC model (Jeffreys, 2006, Preface, para 10) views that curriculum involves the philosophy, conceptual framework, programme objectives, programme outcomes, courses, course components, horizontal threads, and vertical threads. Jeffreys, (2006, pp. 71-77) mentioned that it is better to build curriculums based on learning needs analysis of the actual learning needs of the target audiences.

#### ***8.3.2.1. Learning objectives***

Stating of clear learning objectives is important. It should help to create meaningful portfolios for both the trainers and learners, shape and organize the training progress, help in selection priorities, and save time (Bailey & Guskey, 2000, pp. 27-28). After the nurse's functions have been defined based on working policy, it's important to identify learning objectives. While the Jeffreys' model for cultural competency (2006) and

Perez & Luquis (2008) framework for cultural competency for health promotion and health education both consider that cultural competency has to focus on three dimensional of learning objectives include knowledge, skills, attitude.

As the study aimed to fill this gap by combining both type of studies, however, it appears that the type of learning objectives are varied between health education preparation training courses (Choi et al. 2009; Pisal, et al., 2007; Demir et al.,2009; Kaymakc et al., 2007; Lamiani & Furey, 2009) and cultural competency preparation training courses. Those training courses were controlled by their outcome goal. Pisal, et al., (2007); Choi et al., (2009) both cover three dimensions of leaning, Lamiani & Furey, (2009) cover knowledge and skills while both (Demir et al., 2009; Kaymakc et al., 2007) has skill learning objectives only.

On the other hand, some of the cultural competency training courses (Berlin, et al., 2010; Brathwaite, 2005) cover three dimensions of leaning objectives, or cover knowledge of cultural context objectives only (Majumdar et al., 2004), while several publications and models of transcultural nursing (Campinha-Bacote, 2007; Lipson & DeSantis, 2007; Berlin, et al., 2010; Long, 2012) all believe that cultural competency in nursing curricula content must include the three dimension of learning (knowledge, skills, attitude). Therefore, this model has considered those three dimensions in its design, and for its educational curriculum also. As shown in the model figure (7), the objective of the educational curriculum relates to: knowledge, skills, and attitudes related objectives.

#### 8.3.2.1.1. *The knowledge or cognitive objectives*

Setting of knowledge or cognitive learning objectives that that help to achieve cultural competence of health education required some considerations. Due to lack of literature about cultural competency of health education, most of the theoretical models of cultural competency such as (Jeffreys, 2006) has more focus is on the cultural issues knowledge-based. Jeffreys (2006, p. 31) has defined the cognitive learning dimension as "a learning dimension that focuses on knowledge outcomes, intellectual abilities, and skills. Within the context of transcultural learning, cognitive learning skills include knowledge and comprehension about ways in which cultural factors may influence



professional nursing care among clients of different cultural backgrounds and throughout various phases of the life cycle". Even Perez & Luquis provided framework for cultural competency of health education, however, the authors suggested Awareness-and Knowledge-Based Objectives (Perez & Luquis, 2008, pp. 165-66) that mainly focused on knowledge of cultural related issues more than knowledge of basics of health education which only limited by appropriate health promotion and disease prevention strategies for different ethnic and racial groups.

On the other hand, combining the points of the training courses for both health education and cultural competency may indicate that required wider learning knowledge-based objectives. The problem is that the training courses for health education whether they have general knowledge objectives (Choi et al., 2009; Lamiani & Furey, 2009) or specific knowledge building on specific disease (Pisal, et al., 2007), or specific knowledge for specific tasks (Demir et al., 2009; Kaymakc,I et al., 2007). Target knowledge included: Knowledge of patient-centered model, patient education process; sense of preparedness to provide patient education (Lamiani & Furey, 2009); material for health education; information-giving (Choi et al. 2009); and preparing material for patient education (Demir et al., 2009). Despite the variation of target knowledge, generally all of the studies has shown that the effective knowledge building of learning experiences of patient teaching was highly valued by the nurses and help them to feel prepared in the tasks they were trained about (Choi et al. 2009; Demir et al., 2009; Kaymakc,I et al., 2007; Lamiani & Furey, 2009; Pisal, et al., 2007). Therefore, in consideration summary of the previous knowledge areas discussed above, this study findings, and considering the operational definitions of this research (see chapter 2) the cognitive objectives focus and concerned with the acquisition of facts, concepts, and principles that the nurse will need for use in various situations related to provision of cultural sensitive or competency health education. Those include:

- 1- To learn learning principles of health education
- 2- To learn how to manage health education activities
- 3- Principles of building relationships between nurses and patients from different ethnic groups.
- 4- Knowledge of the basics of the common languages used in education (depends on each country's need, in Saudi Arabia it is Arabic and English)

5- Knowledge how to make an effect on patient regarding lead to behavioural change.

The following table (49) shows the content of the educational curriculum that has to cover the cognitive objectives based on the findings of this study.

**Table (49) target subjects of knowledge**

<b>Main subjects of knowledge</b>	<b>Subcategories</b>
English & Arabic languages	Knowledge of the structure and content of the Arabic & English languages include its meaning & spelling of words, rules of composition, and grammar.
Communication	Knowledge of communication, and dissemination techniques and methods. Barriers to effective communication. This includes alternative ways to inform and entertain via written, oral, and visual media.
Education/ Instruction/ Teaching	Knowledge of principles and methods for teaching, assessment of the educational needs, planning the educational activity, conducting teaching and instruction for individuals, and the evaluation of provided education.
Counseling	Knowledge of principles, methods, and procedures of rehabilitation, counseling and guidance of patient & family.
Basic of Administration & Management	Knowledge of basics of management principles involved in health education strategic planning, resource allocation, and coordination of people and resources.
Basic of Human Psychology.	Knowledge of human behavior; individual differences in ability, personality; learning and motivation;

8.2.3.2.2 The psychomotor or skill objectives.

Psychomotor or skill objectives are another type of learning objective considered in creating a model educational curriculum. There is no definition found identify or reflect the concept of cultural competency skills of health education. Theoretically, there are different concepts provide different ranges of psychomotor or skills domain related to cultural competency and health education. One of the famous concepts is cultural skills of Campinha-Bacote (1999, 2001, 2002). Campinha-Bacote defined

Cultural skill as the ability to conduct a cultural assessment to collect relevant cultural data regarding the client's presenting problem as well as accurately conducting a culturally-based physical assessment. Another concept is the Transcultural Nursing Skills. It defined by Jeffreys (2000) as cited in Jeffreys (2006, p. 31) as "those skills necessary for assessing, planning, implementing, and evaluating culturally congruent care which include cognitive, practical, and affective dimensions". This concept could be more ideal for cultural competency of health education. This because Campinha-Bacote, (2002) of cultural skills may limits cultural competency of the assessment skills while there are other skills required to implement the concept of cultural competency rather than the assessment. Perez & Luquis (2008, p.166) agree with Jeffreys model of the required skills and set many skills required for provision of cultural competency of health education which should cover all of the health education stages that include assessment, planning, implementing, and evaluating.

Evidentially, combining the health education and cultural competency training courses indicate that culture competency of health education required wide range of skills. The communication skill are the most commonly considered skills for health education training courses (Choi et al. 2009; Kaymakc et al., 2007; Lamiani & Furey, 2009; Pisal, et al., 2007;), and also for cultural competency training courses (Berlin, et al., 2010; Majumdar et al., 2004). The other considered health education skills included: Clinical management and counseling (Pisal, et al., 2007); preparing topic content, develop appropriate educational material (Kaymakc,I et al., 2007). For cultural competency skills some training courses (Brathwaite, 2005) used and discussed the required skills for cultural competency based on concept of cultural skills of Campinha-Bacote, (1999, 2002), as result, their focus on skills training just on cultural assessment. While other courses (Berlin, et al., 2010) included skills in dealing with sociocultural issues concerning assessment, cross-cultural communication, eliciting different perspectives, negotiating, and providing health services. This may validate that competency required more than cultural assessment.

The psychomotor or skill objectives for this model is set primarily based on the study findings, and secondarily in considerations of the framework of Perez & Luquis, (2008) and Jeffreys (2006) model. Also consider previous practical training courses which focus on communication. The objectives involve practical training on skills

needed to perform complete a competent health education successfully. Some skills are relatively simple, but some are very complicated involving complex information-processing and decision-making with more focus on communication related skills. The following objectives were set to insure nurses are skilled enough to perform a cultural sensitive/competence health education.

- 1- Training nurses on how to ideally select and differ between different teaching strategies and methods for different ethnic and racial groups.
- 2- Training nurses on how to coordinate educational needs and activities with other healthcare team.
- 3- Training nurses on how to critically think and then solve problems related to culture or health education activities.
- 4- Training nurses on how adjust and balance between nursing care priorities and providing health education in presence of heavy workload.

The following (50) shows the content of the educational curriculum that has to cover the previous objectives.

**Table (50) target skills**

Target skills	Subcategories
Communication	Verbal and non-verbal communication techniques, designing written communication, questioning and interviewing skills, and dealing with emotional expression, and evaluating the effects of communication
Active Listening	Verbal Signs of Attentive or Active Listening, Non-Verbal Signs of Attentive or Active Listening, and the 10 steps of active listening
Coordinating	Adjusting actions in relation to others' actions, and communicating with other colleagues to arrange for patient educational activities, and teamworking
Problem Solving	Understanding the implications of the information provided by patient for both current and future problem-solving and decision-making of health education
Critical thinking	Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems
Time management	General Time Management Tools, Scheduling, Time Management Challenges, Prioritization based on type of activities (Crisis Zone,

	Productive Zone, Busy Zone, Fruitless Zone).
Selection Learning Strategies	Principles for selection, Responding and effectiveness to concerns, selecting based on resources availability,

### **8.2.3.2.3 The knowledge about specific cultural context learning objectives**

This domain focuses on knowledge of specific cultural context learning objectives. Identifying learning objectives for specific cultural context that can generalize for nurses in difficulty. This because cultural attitude and values are different from country to another. Theoretically Jeffreys (2006) has mentioned that there is need for learning dimension concerned with attitudes, cultural values, and beliefs, and is considered to be the most important in developing professional values and attitudes. This learning includes self-awareness, awareness of cultural gap (differences), acceptance, appreciation, recognition, and advocacy". In health education, Miller et al. (2011, p. 35-36) mentioned this domain should focus in influencing attitude, motivating learners, developing respect, clarifying values. Also the health educator can seek help from others such as spiritual leaders and values colleagues or people in the community. Miller idea is that using strategies from the same culture can show respect toward patient's values and attitudes and may have better response to health education. Modeste et al. (2004) has added that methods of adjustment patient's cultural values and beliefs also could be used.

Practically, cultural competency training courses as focused on knowledge of different cultures, ethnic groups, traditions, religion, differences in health-seeking behavior (Berlin, 2010); understanding of multiculturalism, cultural awareness, and cultural differences, cultural beliefs, considering social circumstances, and adopting healthcare literature (Majumdar et al., 2004), and knowledge of cultural nutritional differences (b) different types of health-seeking behaviors and practices, and cultural beliefs and practices during the provision of care (Brathwaite, 2005). This would make it difficult for any researcher to consider those findings simply as those studies are driven by their different goal and objectives. The found training courses of health education (Kaymakc et al., 2007; Lamiani & Furey, 2009; Pisal, et al., 2007) except Choi et al. (2009) has

omitted this part of learning domain, but our study findings found that this part would be very important as the measured strategies to develop cultural competency which imprinted by the Saudi culture were perceived would be very useful for health education practice and considered in the specific cultural context learning objectives. This means that nurses has to learn to be open to different cultural encounter experience, engaging in life with patients, cultivating values, managing oneself, and developing oneself toward cultural competency of health education. Hence, the multicultural nursing workforce can become sensitive to multicultural patients and awareness of their cultural values in consider those in their educational. The objective of this part include:

- 1- Knowledge of cultural norms, values, and believes among members of different ethnic and racial groups compare to personal cultural beliefs and values of nurses as educator
- 2- Knowledge of cultural and religious health beliefs that influence health behavior among members of different ethnic and racial groups.
- 3- Knowledge of behaviors and beliefs that would negatively affect nursing provision of cultural sensitive/competency health education

The following table (51) shows the content of the educational curriculum that has to cover the previous objectives.

**Table (51) target knowledge of cultural context**

<b>Target knowledge of cultural context</b>	<b>Subcategories</b>
Basic knowledge of Sociology & culture	Knowledge of main groups behavior and dynamics, societal trends and influences, ethnicity, cultures, beliefs, values and norms.
Health beliefs	Knowledge of cultural health beliefs that practiced or respected by the population, Using of religious health beliefs to influence healthy behaviors
Health	Knowledge of cultural and religious restrictions and challenges, and

education cultural practices	strategies to deal with them such as gender segregation roles.
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### **8.3.3 The motivational interventions**

#### ***8.3.3.1 Removal of workplace and cultural barriers***

As shown in the study findings, lack of motivation is a major barrier for hospital nurses in Saudi Arabia. Hence, as is shown in Figure 7, the motivational interventions that are required include the removal of workplace barriers, and the removal of cultural barriers that can be controlled by managerial personnel inside a hospital. Together, these distinct interventions determine certain aspects, such as cultural norms during family visiting times. The workplace environment is a very important factor that has to be considered when thinking of developing culturally sensitive health education for hospital nurses. Some models do consider it. The Model of Carney & Kahn (1984) has five stages to develop cultural competency. Its general idea is that the learner's ability to reach the higher stages of competency is affected by the challenges and resources of the learner's work environment. Meaning the development of cultural competence required shared efforts and interactions between the health educator and the work environment. Hence, the health educators in presence of resources availabilities will be able to grow-up from stage one toward the higher stages of competency progress. In stage one of Carney & Kahn (1984) model, nurses as health educators require more training to build a knowledge base on culture theory, while in stage two, this training needs a more ideal environment that allows a deeper knowledge of the culture and exposure to experiences that challenge the ability to correspond within the venues of the culture. Carney & Kahn (1984) mentioned that the training and working environment must be supportive to allow health educators in matter of continuing academic study, participation in lectures and workshops, and ongoing self-examination of personal attitudes and sensitivity awareness. This environment must deal with challenges of these kinds of experiences.

Rankin (2006, pp. 122-23) mentioned that the heavy daily working schedule, pressure of clinical duties, it difficult even to attend continues educational programs, hence, the motivations must go beyond the educational workshops, other motivational activities such as reward and incentive programs, peer and colleagues support to share the ideas and experiences about health education, reduce environmental distraction should help. Also our study findings has also shown the practice of health education is affected by working conditions which challenge nurses to become competent in health education. In another word, the education of health education alone is not sufficient to create a competency of health education.

### ***8.3.3.2 To Provide a more Supportive Environment through Managerial Support***

As shown in Figure 7, the motivational interventions indicate the need for a more supportive environment, alongside the requirement for managerial support. Looking to the summary of both the theoretical and our study findings, it both indicate that type of motivational management to provide more supportive environment for both nurses and workplace required using management style such as Bondas (2009) idea of management. Bondas suggested that manger has to be "the active developer". Means managers has to create the best as possible of positive available educational environment in combination with a caring leadership to develop nursing health education practice. Hence, without this style of developer managerial support that must be recognized, development of nurses' performance of daily health/patient education could be difficult to achieve. As a result, this model consider that making a motivational interventions is the second essential part of the internal dimension of this model. The motivational intervention is referred to any actions or activities beyond the educational activities that aim to encourage nurses to do more competent practice of health education, and to influence the workplace environment to support competency of health education practice. Therefore, two objective are set to insure meeting this goal include:

- 1- Provide more motivational actions toward nursing workforce to insure provision of cultural competency of health education.
- 2- Motivate workplace environment to influence better practice of health education as possible.



The following table (52) shows the actions required at the nursing administration level to address the previous objectives.

**Table (52) shows the actions required from nursing administration to influence the health-education environment**

Target	Actions or interventions
Staff nurses level	<p>Provide Self-directed learning packages, computer assisted instructions and computerized inventory, newsletter and sources for updating knowledge of health education, frequent peer review meeting regarding health education, and reward and incentive programs. Additional strategies to deal with previous presorted barriers:</p> <ul style="list-style-type: none"> <li>• lack of patient education in clinical nursing programs required more content of health/patient education in nursing education curriculums. It also required more training opportunities for staff nurses.</li> <li>• The lack of common language and culture of communication can be covered by the previous subject of know edge and skills of communication, and subjects of Arabic and English language.</li> </ul>
Workplace level	<p>Adjust workplace to be more educational (if possible), availability of teaching tools, material and resources, Decrease reported barrier of health education include:</p> <ul style="list-style-type: none"> <li>• Giving extra time to provide health education (can be adjusted by somehow by learning time management skills or providing more staff if possible)</li> <li>• lack of teaching tools of patient education must be fixed by financial support as first. Learning Appropriate Selection of knowledge of learning Strategies may would be helpful in dealing with its shortage.</li> </ul>

#### 8.4 The External dimension

As shown in model figure (7), the External educational dimension is about interventions or actions from other personals or organizations outside hospital setting. It mainly reflects interventions at healthcare system level. In addition, two sub-levels are presented, which include: interventions for health policies, and interventions for the community.

### **8.4.1 Health Policy Level**

As is highlighted in the Figure 7, the health policies required updating. Moreover, the policies of nursing care also required updating to insure that they support prioritizing health education as a primary task. Simultaneously, other policies for nursing practice of health education have to be updated in order to enhance more training opportunities for nurses (see table 53). In addition, the health policy has to insure that it supports more usage of media to influence health education for the community. However, due to the high cost of media, it is required that the health policy is initially and unequivocally supported. Subsequently, the media usage has to be followed by research on the media impact on the Saudi community, which must be administered by the Saudi Ministry of Health.

Overall, the health policy level will be raised through work with other healthcare providers, such as Primary Healthcare Centers, which help distribute health promotion and education among the community. Furthermore, projects with local religious leaders can also encourage healthy behaviour in mosques and at religious occasions, which can contribute to better health.

### **8.4.1 Community level**

The findings has shown that the practice of health education is affected by other factors and barriers outside hospital setting and decreasing those barriers required an actions from outside hospital setting. Hence, the cultural sensitivity health education model despite it was designed for hospital nurses, however, it cannot ignore this findings and it required help and support from other personals and organizations outside hospital setting such as primary healthcare centers and mosques. Therefore, the external dimension of this model was set of recommendations and strategies that should help to control those barriers in order to encourage provision of health education inside hospital setting. This dimension has two objectives include:

- 1- To provide an actions against health education cultural challenges that affect nurses inside hospital setting.
- 2- To provide an actions toward nursing polices to influence health education,

The following table (53) shows the actions that the health authority (MOH) has to take to address the previous objectives.

**Table (53) shows the actions required from the health authority to influence the health-education environment**

Target	Actions or interventions
Community level	1- There is need to work with other healthcare providers, such as Primary Healthcare Centers, which help distribute health promotion and education among the community. 2- Projects with local religious leaders can also encourage healthy behaviour in mosques and at religious occasions, which can contribute to better health
Health policy level	1- Set health education is priority and primary responsibility within the nursing policy. 2- Provide more support toward training of health education 3- Use general media to: <ul style="list-style-type: none"> <li>• Influence healthy behaviours,</li> <li>• Send promotional messages about the importance and role of nursing in healthcare to deal with lack of nursing acceptance in the community.</li> </ul>

### 8.5. Conclusion

This chapter has presented the final shape and structure of a practice-based culturally-sensitive health education model. The study findings indicate that practice-based health education is affected by several factors beyond the nursing curriculum, such as health policy and patient community cooperation. This is reflected in the model shape, as the model covers two dimensions of actions and recommendations internal and external to the hospital setting. These are required to ensure that all the factors identified by the study's findings, such as the lack of training among staff nurses and nurse instructors, barriers to health education, and culturally related values, are addressed. Internal activities would help to deal with the challenges of practice-based health education by providing training and motivation within working environments to influence health education inside the hospital setting. The external factors mean that the healthcare system has a wider role to play, as there is a need to cooperate with other community and healthcare organisations, use the media, and update health polices to ensure the promotion of health education. Hence, both the internal and the external dimensions ensure that the practice-based model is comprehensive and not lacking in scope and vision.

## **Chapter 9 Reflection on the research experience**

### **9.1. Introduction**

This chapter is a reflective summary of the research experience. The chapter first considers the strengths and limitations of the study and this is followed by the implications of the study for future research in the post doctoral period. A personal reflection upon the study process is then discussed followed by a series of recommendations as a result of this study. These recommendations encompass practice at the frontline of practice (hospital nurses), within nurse management (operational issues) and within the health authority (strategic issues). Finally the contribution of this study to knowledge and professional practice within nursing is given.

### **9.2 Strengths of the study**

#### ***9.2.1. Creating a practice-based model of health education for hospital nurses***

Several strengths and advantages of this research make the researcher proud of this project and give a feeling of achievement. Those include the creation of a new model for hospital nurses, and new educational guidance that can develop practice-based culturally-sensitive health education in Saudi Arabia. This new model is the first model especially designed to provide hospital nurses with a clear systematic framework to underpin and influence their education/training for health education.

This model has the potential to inform the nurse education curriculum and it also has the potential to be applied within work based learning and continuous professional development for nurses who are already qualified.. The systematic training need analysis illustrated within the components of the questionnaire and within the staff interviews was the starting point for this educational project, and it is a point of strength for this research and this model. as successful educational projects must start with training needs analysis. This is because it is the first step required to identify training or staff performance problems (Gould et al., 2003). It identifies knowledge, skills, abilities, and attitudes required to meet the personal and workplace development needs of nursing staff. (Donovan & Townsend, 2004, p. 6). Finally, learning needs analysis can determine if training is required or not. It can clarify what the priorities; otherwise training will be a waste of time (Barbazette, 2006, P.6). & (Drummond,

2008, p.5). Hence, this model should fill the gap about nursing education as preparation for health education within nursing practice, especially as there is a need for a systematic educational framework for teaching nurses about the provision of health education (Park, 2005). Also, the study used both theoretical and practical evidence regarding health education within hospital nursing practice to create the model, this would provide the educational model with confidence about most the appropriate approach for educational intervention in this setting (Braungart & Braungart, 2007). Hence, the model can be used an educational or training guide and also for the clinical practice of daily nursing activities related to health/patient education.

In addition, this study could help to change the vision of practice-based nursing education for two reasons: At first, the model goes beyond regular nursing education that focuses on providing knowledge and skills to implement specific tasks, it has considered how nursing working conditions, the professional context of hospital nursing itself can influence practice.. Hence, as outcome of addressing the working environment and the culture of nursing practice within hospitals, it should enhance the provision of health education in hospitals specifically.

#### ***8.5.1.2 A plan for generalizability of the study***

The generalizability of the findings and the model was a primary goal of this research before creating the model. Despite the creation of the model, the study provides a wide range of findings regarding practice-based cultural sensitive health education. The model might have utility in other areas facing similar problems, or the cultural dimensions might inform practices for health education when working with Islamic peoples to better understand the nuances of practice and beliefs. Moreover, it is true that this study is about a health education project for nurses in Saudi Arabia, however, most of the literature found and used to inform the study draws upon international perspectives (see chapter 2 for details), which also increases the possibility to generalize the findings beyond Saudi Arabia, especially as the study has created a new model not yet presented in the nursing literature. Also, the study used a probability sampling approach to recruit participants for both questionnaire and interview, which means the randomization of participants. This could help to increase the generalisability of the study (Gerrish & Lacey, 2010).

### ***8.5.1.3 Use of mixed methods***

The advantages of mixed methods were previously discussed. For this project, the selection of a mixed method approach was an ideal choice, and should be a point of strength for this study for several reasons. It provides this research with clear identified and detailed data to help understand the findings (Best, 2012). This helps the researcher organize the priorities of training needs, barriers of health education, and level of power of cultural norms and how to deal with them using cultural sensitivity development strategies, which as result have influenced the model design.

It also triangulates and strengthens the validity of study findings as most of the findings of each method validated each other findings (Best, 2012; Polit & Beck 2008). This helps the study to explain quantitative identified data by understanding of qualitative data (Greene, 2007). This is important for this study as it the first study that tried to measure thee main themes in one study including learning needs, barriers, and culture in order to creates a practice-based educational model. This according to Speziale & Carpenter (2011) should provide more confidence about the validity and reliability of study data.

## **8.5.2 Limitations of the study**

### ***8.5.2.1 Language barrier***

On the other hand, there are some limitations and challenges faced during this research experience. Language as a barrier to health education in the hospital is one of the main findings of this study, and it also has the potential to limit interview data collection. English is the second language for the researcher, and half of the interviewees were expatriate nurses speaking multiple native languages. During some interviews, the researcher felt that some of the expatriate nurses were unable to express or answer the questions in a way that reflected what they wanted to say from their hearts. Some interviewees were looking for the right word to express what is in their heart. Even though the researcher asked for clarification, some information could be lost during interview data collection due to this barrier.

In addition, the different accents of the English language between the researcher from one side and different accents of the interviewees created challenges for the two licensed translation agents. This makes the transcription time-consuming because the

researcher is speaking to the participants in English as a second language and so there are some English grammar mistakes. This led to the decision to conduct this study using verbatim transcription of the interviews because the researcher has worked in such a communication environment for seven years and understands the nurses' English accents.

#### ***8.5.2.2 Lack of evidence***

The study has answered all of the research objectives. Due to the nature of this new project, there were some challenges faced by the researcher to enhance rigour.. There was a lack of studies with similar aims and objectives. There was no one single study found with a similar aim to this study to make a better comparison. Even when searching for each theme alone, there was a problem to find studies that covered some themes. There is a lack of studies that examined nurse's knowledge and skills of health/patient education, instead, there are many studies that explored the barriers to health education within nursing practice. Shoqirat & Cameronb, (2012) has reported similar problems and found that that there is little evidence is available to inform the development of hospital nurses' role in health promotion and to deliver culturally sensitive health promotion practice.

In addition, the Saudi Arabian culture shares some similarities to the rest of the Arab countries, however, it is also unique and it is not culturally identical to the Arabic or other Islamic countries (Al-Shahri, 2002; Almutairi, 2011). Hence, it is not easy to compare cultural related findings related to any other study that examines nursing cultural sensitivity or competency due to different cultural values and norms.

#### ***8.5.2.3 Further research on the implication of the model***

This point is not a limitation as much as a future requirement for model developed within this study. The created model is still a theoretical model. Even though it was built based on theoretical and evidence-based findings, it now requires further research to test it in reality as a guidance for hospital nurse education as preparation for the role of health educator.. Further research is now required to identify other issues related to this model which were unable to be tested by this study. Those include: points of strengths and any possible limitations during the implementation of this new model;

the outcome of effectiveness of the model on nurses' practice of health education requires consideration

The researcher has planned two research projects for post doctoral development. The first is about using the educational curriculum, it aims to test the outcome of the educational curriculum, its cost-effectiveness and the strengths and limitations of educating nurses using the model. The researcher has got approval for implementing the model but requires time to discuss a timetable and action plan with the Local Ministry of Health in Aljouf (GDJHS) to arrange for implementation of the educational program. The other research is about the effectiveness of other strategies supporting the model, such as the impact on prioritizing health education, using the media, cooperation with other health departments. Those require more time, teamwork, financial support and further approval from the headquarters of the MOH. Hence, the model creation is just the first part of further required research.

### **8.5.3. Reflection upon the research process**

The researcher has learned three lessons from this study. First, research is a real challenge even when prepared with very good planning. It starts with massive background reading, involves several data-collection challenges, and sometimes it ends with some unexpected findings, such as with this study which found that the role of language inconsistency in nursing education does affect health education.

The second lesson learned by this researcher is that it may be better to reapply all the research that deals with or measures cultural issues elsewhere due to cultural differences, and that people hold their cultural values and norms that change with time, meaning that what is culturally challenging today might not be challenging ten years from now.

Finally, research on health or medical-related topics is a kind of argumentative research from the beginning, meaning that what is good for one researcher might not be good for other researchers, due to a lack of conceptualisation of several health-related topics. And this affects the level of agreement and critical appraisal of the quality of the literature review, research methods and even the findings and their



implementation in the field. Hence, the researcher's best choice may be to use an operational definition to guide his research even if this operational definition can be criticized itself.

## **8.6 Study recommendations and contribution to practice**

### **❖ At the staff-nurse level:**

- 1- The staff nurses need to learn time management as it would help to save more time to provide health education
- 2- Nurses need to learn noise-controlling techniques in order to create more positive environment to provide health education,
- 3- Nurses need to learn selection of appropriate learning strategies in order to decrease the impact of lack of teaching tools and educational resources on health education
- 4- The nurse must have desire to learn and to provide health education as health is largely depends on hospital nurses to provide health education

### **❖ At the nurse-manager level:**

- 1- There is a need to provide more training opportunities for systematic, consistent training in health education for hospital nurses. This means sending nurses for training in specialised centres in Saudi Arabia or overseas in addition to regular continuous medical education.
- 2- There is a need to engage in motivational interventions to encourage nurses to provide health education, including the removal of barriers to health education There is need for application of more moral and financial support.
- 3- It is imperative that the nurses' managers/instructors use varied required skills for nursing training in health education, which specifically emphasizes communication; active listening; problem-solving; coordination; social interaction and perceptiveness, the selection of appropriate learning strategies, time management and critical thinking.
- 4- The nurses' managers/instructors have to implement the following subjects of knowledge as a requirement for nursing training in health education. Those include: knowledge of education/ teaching/ instruction; English and Arabic

language; knowledge of means of communication; basic knowledge of human psychology; counselling; administration and management; basic knowledge of sociology and culture. This large number of learning needs requires cooperation with training centres, the recruitment of experts in various fields, and sending nurses to learn in other centres or countries

❖ **At the health-authority level**

- 1- There is need to use reputable media to disseminate messages to counter the negative vision of the Saudi community concerning nursing in Saudi Arabia, and to send out more health education and promotional messages. This media usage has to be followed by research on the media impact on the Saudi community.
- 2- Health authorities must cooperate with other external organizations, such as mosques, to spread healthier messages.
- 3- Health policies have to be regularly updated to ensure they influence health education, such as prioritising health education in primary nursing care.
- 4- There is a need to provide more effective and sufficient training opportunities so that clinical instructors can update their knowledge about health education and be competent in teaching health education to staff nurses.
- 5- Nurse managers have to get additional managerial training to ensure they are able to create a positive work environment for hospital nurses, which should be reflected in increasing nurses' desire to practise health education.

## **8.6 Contributions for practice**

- 1- This study has identified that the nursing education preparation for health education within nursing practice has to change its vision from a traditional education style that focuses on how to provide health education into how to provide and manage the practice conditions of health education because nurses can learn but they cannot provide health education due to the working conditions. Meaning the current content-driven nursing education curriculum needs to be developed and shaped into a problem-solving curriculum that

would better prepare nurses to deal with the environmental and workplace barriers that influence their practice as health educators.

- 2- The study has illustrated that education for practice-based health education requires a wide range of knowledge and skills that must be identified through a systematic training needs analysis of both theoretical and practical assumptions related to health education. The study has considered the importance of training needs analysis.
- 3- The study has illustrated that the teaching of health education must cover four dimensions including: theoretical knowledge of health education, psychomotor skills for health education, cultural background, and skills for managing working conditions.
- 4- The study has illuminated the impact of work environment and working conditions upon the practice of health education by nurses. In particular the study has found that barriers to health education could be managed by staff nurses not only by nurse managers by using the same required knowledge and skills of health education.
- 5- Competence within practice-based cultural sensitive health education for hospital nurses cannot be achieved by the hospital's interventions alone. It requires support from outside the hospital from the higher health authority and community support.
- 6- Mixed methods is a helpful research design and is recommended in research projects that focus on cultural educational programmes, as it helps to identify the learning needs and understand related issues.

## 8.7 Conclusion

Saudi Arabia requires more health promotion and education intervention. This is due to an increase in chronic and non-communicable diseases. Also, there are some cultural values and beliefs that create challenges for the Saudi healthcare system, daily nursing practice, and have an influence on the creation of a culturally sensitive health education model for nurses in Saudi Arabia. The model has to be practice-based to ensure it is reliable for nursing practice. This requires mixed methods in order to identify and understand several factors, include nurse's knowledge, skills, competence, barriers, and strategies for developing culturally sensitive health education.

The practice-based cultural sensitive health education model developed within this research is complex. Practice-based means a model that considers both the theoretical knowledge and evidence based findings of health education. Cultural sensitive means the model considers and reflects awareness and respect of cultural norms, values and beliefs. Health education means the model considers and reflects health education principles, knowledge and skills for the practice of health education. Due to this complex formula in addition to the findings, dealing with all problems such as nurses' learning needs and barriers to health education, especially cultural related barriers, it indicates that dealing with those challenges, and application and implications of the model requires cooperation and help from hospitals and beyond hospitals scope such as cooperation community organizations. The model developed can enable the development of health education, and its application can help nurses to control the challenges of their working conditions. Further research is needed to test the model in practice, to refine its elements and evaluate its use.

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## 10.Supportive appendixes and used forms

### 10.1 Appendix (1). The CVI result

<b>Health education skills</b>	<b>CVI</b>	<b>Possible barriers</b>	<b>CVI</b>
Speaking & Communication	.92	Lack of knowledge about patient education methods	.92
Active listening	.94	Lack of patient education in clinical nursing programs	.98
Critical thinking:	.83	Job dissatisfaction	.86
Appropriate Selection of Learning Strategies	.96	Nursing acceptance in community	.88
Problem solving-	.98	Salary insufficient	.92
Coordination:	.94	Lack of teaching tools of patient education	.84
Social interactions & Perceptiveness:	.92	Frequent shift rotation	.85
Time management	.88	Lack of scientific sources of patient education	.98
<b>Health education Knowledge</b>		Lack good educational environment in hospital	.99
Education/Teaching/Instruction	.99	Lack of tendency in patient for learning	.94
English & Arabic Language	.92	Insufficient time for education	.90
Communications	.95	Existence of anxiety and pain in patient	.96
Human Psychology	.94	Existence of shame of patient in learning	.91
Counseling	.90	Lack of common language and culture of communication with patient	.87
Administration & Management	.83		
Sociology & Culture	.95		
<b>Saudi cultural develop strategies</b>	<b>CVI</b>	<b>Gender segregation strategies</b>	<b>CVI</b>
Prioritize health education as a primary practice within Saudi Nursing policy.	.92	Assign health education to nurses who accept providing education to both genders	.84

Use of Islamic health beliefs (such as eating moderately, not smoking, personal hygiene & etc.) to encourage healthy behavior	.90		Each gender provides health education to the similar gender only	.85
Use general media to encourage healthy behaviour among population	.86		Encourage nurses to accept provision of health education to the other gender as it part of their nursing role if needed	.92
Work with clergies and mosques to encourage health education healthy messages.	.94		To assign health education work to Arabic speaking expatriate nurses	.96
<b>Develop expatriate nurses</b>				
Provide Arabic language and cultural training courses	.98			
Recruit nurses with background knowledge of Islamic and Arabic cultural values	.88			
To assign nurses from different countries to work with Saudi nurses in each shift to learn from each other	.95			

## 10.2 Appendix (2) Research Participant Consent Form

**Title of Project:** To design a practice based model of health/patient education for hospital nurses to use within Saudi Arabia

**Name of Researcher:** AHMED ALDOSH

- I confirm that I have read and understood the information sheet for the above study (version x- date) and what my contribution will be.

Yes	No
-----	----

- I have been given the opportunity to ask questions (face to face)

Yes	No
-----	----

- I agree to take part in the interview

Yes	No	NA
-----	----	----

- I agree to the interview being digitally recorded

Yes	No	NA
-----	----	----

- I understand that my participation is voluntary and that I can withdraw from the research at any time **without giving any reason**, my interview digital record and interview related notes will be destroyed if I decided to withdraw.

Yes	No
-----	----

- I agree that the findings of data analysis only will be used for publications

Yes	No
-----	----

- I agree to take part in the above study

Yes	No
-----	----

- ( for Saudi female participant only), I agree that the researcher offer me an

--	--

opportunity to be interviewed with accompany of another person  
(spouse/relative/ chaperone)

Yes	No
-----	----

Name of participant .....

Signature .....

Date .....

Name of researcher taking consent

.....

Researchers e-mail address

.....

### 10.3 Appendix (3) interview guidance protocol

<b>Interview number:</b>	<b>Participant Position:</b>
<b>Date of interview</b>	<b>Hospital name code:</b>
<b>Time of starting:</b>	<b>Participant Code Name:</b>
<b>Supportive codes:</b> FL=female   ML=male   S=Saudi   N=non Saudi   St=staff SU=supervisor   Inst=instructor   M=Nurse manager	

#### Guidance questions

Questions	Researcher Comments
Can you give me a brief description about yourself? your qualification, experiences, any health education training background?	
How can describe the current performance of health education of nurses?	
what are the skills that often used by <u>nurses</u> when conducting HE activities?	
what are the common skills that you feel nurses needs to learn to provide effective health educational activities	
what are the subjects of health education knowledge that you feel nurses needs to know to provide effective health educational activities?	
<b>Barriers</b>	
What are the common nurse's related barriers for providing effective health education?	
What are the workplace related barriers that hinder providing effective health education?	
<b>Saudi culture</b>	
How can you describe the impact of the Saudi culture on nursing practice of health education?	
How can you <u>cope/manage</u> with Saudi cultural issues or cultural barriers? please explain?	
What are the cultural related barriers that hinder providing effective health education?	
Is there any recommendations or suggested solutions to deal with the Saudi cultural issues that affect health education? please explain	

<b>The multicultural nursing workforce and HE</b>	
what strategies you recommend that may help to take advantage of this large number of expatriates nursing in the provision of health education?	
Is there any other issues you would like to add to this topic in order to develop Saudi cultural sensitive health education model?	

Ending time.....

Researcher sign.....

## Appendix (4) ethical approval from University of Salford and GDJHS



Research, Innovation and Academic  
Engagement Ethical Approval Panel

College of Health & Social Care  
AD 101 Allerton Building  
University of Salford  
M6 6PU

T +44(0)161 295 7016  
r.shuttleworth@salford.ac.uk

[www.salford.ac.uk/](http://www.salford.ac.uk/)

3 December 2013

Dear Ahmed,

**RE: ETHICS APPLICATION HSCR13/70 – To design a practice based educational model of health/patient education for hospital nurses to use within Saudi Arabia**

Based on the information you provided, I am pleased to inform you that application HSCR13/70 has now been approved. Please ensure that you provide us with a copy of the agreement from the Aljouf Health Sector for our records.

If there are any changes to the project and/ or its methodology, please inform the Panel as soon as possible.

Yours sincerely,

*Rachel Shuttleworth*

Rachel Shuttleworth  
College Support Officer (R&I)



Ethical approval from Aljouf Health Sector (original & translation copies)

الرقم: ٥٣ / ٣ / ٢١٧٥

التاريخ: ١٣ / ١ / ٢٥ ١٤ هـ

المشروعات:



وزارة الصحة  
Ministry of Health  
(تعميم)

المملكة العربية السعودية  
وزارة الصحة  
المديرية العامة للشئون الصحية بمنطقة الجوف

الموقر  
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الموقر

سعادة مدير مستشفى الأمير عبد الرحمن السديري  
سعادة مدير مستشفى النساء والولادة والأطفال  
سعادة مدير مستشفى دومة الجندل العام  
سعادة مدير مستشفى طبرجل العام  
سعادة مدير مستشفى العيساوية  
سعادة مدير مستشفى القريات العام

السلام عليكم ورحمة الله وبركاته

إشارة إلى الطلب المقدم من الباحث / احمد علوان الدوش بخصوص الموافقة على القيام بدراسة ضمن برنامج لدراسة الدكتوراة في جامعة سالفورد والتي تحمل العنوان:

(To design a practice based educational model of health/patient education for hospital nurses to use within Saudi Arabia)

والتي تهدف الى تصميم برنامج تثقيف صحي يتناسب مع التمريض ، ونظرا لما قد تساهم به نتائج الدراسة من تحسين مستوى الخدمة التمريضية ، عليه نفيديكم ان تمت الموافقة على قيام الباحث بتنفيذ الدراسة في مستشفيات المنطقة، وعليه نأمل منكم توفير كافة الامكانيات وتسهيل مهمة الباحث فيما يتعلق بتنفيذ الدراسة في جميع مستشفيات المنطقة.

وتقبلوا خالص تحياتي...

مدير عام الشؤون الصحية بمنطقة الجوف

د. عبدالله بن صالح المعلم

هاتف مكتب المدير العام ٦٢٤٤٩٠٠ فاكس ٠٤ ٦٢٤٧٢٠٠ سنترال ٦٢٤٨١٢٠ / ٦٢٤٩٤٠٠ / ٦٢٤٩١٠٠

## The translation of ethical approval from GDJHS

*Kingdom of Saudi Arabia*  
Ministry of Health  
General Directorate of Health Affairs in Al Jouf



No. : 2175/3/53

Date : 13/01/1435

16/12/2013

### ( *Generalization* )

<i>Mr. / Director of Prince Abdul Rahman Al-Sudairy hospital</i>	<i>Esquire</i>
<i>Mr. / Director of Maternity Hospital and Children</i>	<i>Esquire</i>
<i>Mr. / Director of Domat Al-Jandal General Hospital</i>	<i>Esquire</i>
<i>Mr. / Director of Tabarjal General Hospital</i>	<i>Esquire</i>
<i>Mr. / Director of Al-Easawiyah hospital</i>	<i>Esquire</i>
<i>Mr. / Director of Al-Qurayyat General Hospital</i>	<i>Esquire</i>

#### **After greeting :**

In reference to the request which made by the researcher / **AHMED ALWAN ALDOSH** regarding the approval for his study within his program to study Phd at the University of Salford as titled :

*(To design a practice based educational model of health / patient education for hospital nurses to use within Saudi Arabia)*

Which aims to design health education program commensurate with nursing , and because of what might contribute to the study results by improving the level of service of nursing , we confirm that this study has been approved by General Directorate of Health Affairs in Al Jouf to be conducted in the region's hospitals . Accordingly, we hope you provide the all support and assistant for the researcher regarding the implementation of this study in all hospitals in the region .

Please accept my sincere greetings ,

**General Director of Health Affairs in Al Jouf**

**Dr. Abdullah bin Saleh Al-Moallem**



## Appendix (5) Summary of qualitative data analysis of education-related objectives

Educationa l related findings	Theme	Subcategory	Statement	Mentioned by
Theme1	Learning needs	General comprehensive education in H.E. is required	<i>They have to be educated about medicine, diet and everything, they need lectures, staff development programmes, things like that we have to provide; the knowledge they should get is the importance of health education ...</i>  <i>we have to have more information about that one (health education), then they will know and they will provide.</i>	16/FL/NS /M/sup
	Learning needs	General Comprehensive education H.E. is required	<i>We need to learn the basics of health education, knowledge and practical skills ... we need to learn more.</i>	9/FL/S/S T/NW
	Learning needs	General comprehensive education H.E. is required	<i>Nurses need to read everything new about health education, publications and most important is continuous medical education, as it should present everything new about health education. The required skills are varied, and sometimes based on the patient's condition, for example nurses may be required to learn how to decrease their level to the patient's literacy level to ensure that the information provided is understood.</i>	5/FL/S/M/ ED
	Learning needs	General comprehensive education in H.E. is required	<i>We need to improve the quality of nurses by giving lectures focusing on this topic (health education), discharge teaching ... orienting and random examinations,</i>	11/ML/N S/M/IN
Theme1	Learning needs	General comprehensive education in H.E. is required	<i>Nurses needs lectures and staff development programmes. These should be included in future education because they have to do with health education.</i>	16/FL/NS /M/sup
	Learning needs	General comprehensive education of H.E. is required	<i>...for a knowledge base, I suggest more comprehensive case presentations, case studies. It is very important to have some basic courses in Arabic. They should be</i>	10/FL/NS/ M/INS

			<i>included in future education. Why is it so important? To expand our knowledge.</i>	
	Learning needs	Specific learning needs (Arabic & English courses)	<i>Here as a nurse you should somehow be good at speaking Arabic and English, because not all patients are Saudi patients...  For Saudis, and with no generalization, nurses should be equipped with basic Arabic and English as one third of the population are not Arabic speakers. For expatriate nurses, they need to learn Arabic, terminology will help.</i>	6/ml/ns/m /inst
	Learning needs	Specific learning, need Arabic courses	<i>I try my best to teach my staff Arabic, they need the basics and with time they will learn and become better ...  we need to teach nurses basic Arabic.</i>	5/FL/S/M /ED
	Learning needs	Specific learning, need English courses	<i>We have Saudi nurses who have problems with English, we give them courses and lesson, after that it will be ok.</i>	16/FL/NS /M/sup
	Learning needs	Specific learning, need Arabic, English	<i>It's good to provide expatriate nurses with Arabic training courses, but Saudi nurses require more training courses in English</i>	9/FL/S/S T/NW
	Learning needs	Specific learning, need Arabic & English courses	<i>Learning basic Arabic and terminology will help us.</i>	6/ml/ns/m /inst
	Learning needs	Specific learning, need Arabic, English courses	<i>We may give expatriate nurses language training courses.</i>	8/FL/S/S T
	Learning needs	Specific learning need assessment	<i>Health education has to include assessment, nursing diagnoses, interventions and evaluation, but first we have to do the nursing process.</i>	18/FL/NS/ M/HE
Theme1	Learning needs	Specific learning, need management	<i>There should be continuous nursing education in health education, specifically, the management of patients, because it covers all.</i>	17/FL/NS/ M/HE
	Learning	Specific learning, need	<i>We can do social education, even with colleagues we can do that one in their</i>	14/FL/NS/

	needs	social, cultural values	<p><i>subjects of nursing education ...</i></p> <p><i>In order to understand someone's behaviour you need to understand their culture, we give orientation about practice, cultural values, the behaviours of patients, so that we can understand them, and get some help ...</i></p> <p><i>Social education has to be included in their studies.</i></p>	M/IN
	Learning needs	Specific learning, need culture, management, teaching	<p><i>"Nurses need to learn to plan care, management, culture ... discharge teaching, exercises, diet, inpatient medication, non-medical treatment ...</i></p> <p><i>We provide orientation about cultural values and cultural practices, and how to deal with them. It's about understanding them [the patients] in order to know how to educate them.</i></p>	14/fl/ns/m /inst
	Learning needs	Specific learning, need teaching	<i>Patient teaching should be included in future nursing education because nurses have to do health education.</i>	(16/fl/ns/m/sup)
	Learning needs	Specific learning, need (diet, exercises, medication)	<i>We educate about diet, exercises, treatment and medication, and about non-medical treatment, because sometimes they bring non-medical treatment that they use in the hospital. We explain to staff about those issues so that their patients know about the consequences of non-medical treatments.</i>	14/FL/NS /M/IN
	Learning needs	Specific learning, need diet, medication	<i>We may educate about teaching diet, medication...</i>	5/FL/S/M /ED
	Learning needs	Cleaning	<i>We can explain to patients things as simple as hand-washing using proper communication.</i>	15/FL/NS /M/sup
	Learning needs	Approach to learning	<i>When there is a patient for discharge, I listen, remember and learn from the doctors while they provide education for the patient.</i>	13/FL/S/S F
	Learning needs	Approach to learning	<i>We ask nurses to surf the Internet to find other references for their education</i>	17/FL/NS /M/HE

	Learning needs	Approach to learning	<i>We are supported by continuous medical education and we include health education to train our staff to be skilled enough to educate patients and families.</i>	14/FL/NS /M/IN
Education-related findings	Theme	Subcategory	Statement	Mentioned by
Theme 2	Education problems	Language inconsistencies in nursing education affect H.E.	<i>They prepare student nurses in English but they are not consistent, the teacher speaks in English and the student nurses speak in Arabic – what is the use? ... In one word, we need consistency.</i>  <i>I see Saudi nurses providing health education but I cannot validate if it's correct and adequate or not because they speak in Arabic</i>	6/ml/ns/m /inst
	Education problems	Language inconsistencies in nursing education affect H.E.	<i>Even if there is a lecture in Arabic, I cannot understand, so what is the use? I will not be interested any more because I do not understand what you are taking about.</i>  <i>If I speak in English and the staff are Saudi nurses speaking Arabic, what is the use? If I do not understand, I will not follow what is being taught to me'.</i>	15/FL/NS /M/sup
Theme2	Education problems	Language inconsistencies in nursing education affect H.E.	<i>It's difficult to do education if there is language hindrance, even if I teach, they cannot comprehend ... this affects their skills in performing basic health education tasks, such as assessment.</i>	(10/FL/N S/M/TNS I)
	Education problems	Language inconsistencies in nursing education affect H.E.	<i>If I cannot evaluate what the staff nurses are telling the patient, I cannot evaluate them.</i>  <i>One suggestion is to solve the language barrier; education is very important, from elementary school onwards they must learn English. As instructor, I am not qualified to have this profession here because there is a problem to speak, and even to comprehend, and even to write, and that is my observation.</i>	(11/ML/N S/M)
	Education problems	Lack of sufficient & effective training affects	<i>There are no training courses, the only option is that I surf the Net myself to seek information, even the last training we got is</i>	8/FL/S/ST

	H.E.	<i>not effective ... Absolutely no training, and even the last provided training was ineffective.</i>	
Education problems	Lack of sufficient training affects H.E.	<i>There is no specialized training in health education”</i>	(5/FL/S/ED)
Education problems	Lack of effective training affects H.E.	<i>“The orientation phase, which is the most important period for nurse training, was just explanation, no chances to do things practically and health education was omitted, which affects us now.</i>	(9/FL/S/ST/NW)
Education problem	Lack of sufficient training affects H.E.	<i>There were some courses in health education but only for staff nurses, and when we are student nurses, we cannot attend them ... We study nothing about health education ...  The problem that they do not consider is that health education is an essential task. If they want to make us good educators, it is from the beginning of our study that we should study health education.</i>	9/FL/S/ST/NW
Education problems	Lack of sufficient training affects H.E.	<i>We need more training in health education, but the problem is time, we do not have time to provide it.</i>	13/FL/S/SF
Education problems	Lack of sufficient training affects H.E.	<i>Every new nurse should have sufficient orientation training about the work and its barriers.</i>	12/M/S/SF
Perceptions about provided education	Satisfaction with training provided	<i>The staff development programe that includes health education is one of the main ways to educate staff in order to have skills enough to educate patients and families. It is the core of staff enhancement, and health education be included in staff lectures.</i>	14/FL/NS/M/INS
Perceptions about provided education	Satisfaction with training provided	<i>'There is good support in training.'</i>	7/FL/S/ST
Perceptions about provided education	Satisfaction with training provided	<i>We have good health education training'.</i>	16/FL/NS/M/SUP

**Appendix (6) Summary of the qualitative of data analysis of the barriers to health education.**

Nature of nursing work-related barriers	Theme	Subcategory	Participant's statement	Mentioned by
Theme1	Workplace related barrier	Workload, shortage of staff	<i>The most important factor is busy work and shortage of staff, in this condition nurses will not be able to provide education.</i>	5/FL/S/M /ED
	Workplace-related barrier	Shortage of staff	<i>One of the factors is shortage of nurses, what is happening is that nurses most of time are preoccupied by their work.</i>	6/ml/ns/m /inst
	Workplace-related barrier	Shortage of staff, lack of time	<i>Shortages of staff are the main problem; also, some departments are asking for pull-outs, basically the workload is increased and even for health education there are compromises... For the shortage of staff and lack of time, one of the solutions is time management.</i>	10/FL/NS /M/INS
	Workplace-related barrier	Shortage of staff, lack of time,	<i>Usually we have lack of time, also lack of staff.</i>	19/FL/NS /ST
	Workplace-related barrier	Shortage of staff, workload	<i>Sometimes shortages of staff and pressure of the workload are barriers to education.</i>	15/FL/NS /M/sup
		Workplace-related barrier	Shortage of staff, lack of time	<i>Also the shortage of nurses is a barrier because we do not have time to give health education.</i>
Workplace-related barrier		Lack of time,	<i>May they can only give information in a very little time when it comes to health education.</i>	6/ml/ns/m /inst
Workplace-related barrier		Lack of time & workload	<i>The problem is lack of time and pressure from the workload, if we have time we can provide better tasks, not only education.</i>	12/M/S/S F
Workplace-related barrier		Lack of time	<i>We need more training in health education, but the problem is time, we do not have time to provide education.</i>	13/FL/S/S F
Workplace-related		Shortage of staff, lack	<i>Other barriers are the lack of staff, lack of time; time does not permit us to give education</i>	14/FL/NS /M/IN



	barrier	of time		
	Workplace-related barrier	Busy/ lack of time	<i>When you are busy, it is not possible to provide health education, sometimes when staff are free they can provide it.</i>	12/M/S/S F
	Workplace-related barrier	Lack of time and workload	<i>For me in the ICU, lack of time and pressure from the workload are not present, but these may be present in other departments.</i>	17/FL/NS /M/HE
	Workplace-related barrier	Workload	<i>One common problem is the workload.</i>	11/ML/N S/M/IN
Theme2	Nurse-related barrier	Subcategory	Participant's statement	Mentioned by
	Language factor	Language barrier affect H.E.	<i>Especially here in Hail, there is a big language barrier, I am taking about Saudi nurses.</i>	6/ml/ns/m /inst
	Language factor	Language barrier affects H.E.	<i>When there is an old patient with her servant, it not possible to provide education because the old patient is not able to receive education and the servant does not speak Arabic or English.</i>	5/FL/S/M /ED
	Language factor	Language barrier affects H.E.	<i>The main problem here is the communication barrier; in my country, I can transfer information easily because thee are no hindrances, no barriers. Unlike here, how could I share my knowledge with the people here if I cannot communicate well ... Because of the language barrier I may describe it (health education) as poor education.</i>	11/ML/N S/M/IN
	Language factor	Language barrier affects H.E.	<i>As I have observed, the main limitation of individual nurses is the language barrier.</i>	14/FL/NS /M/IN
	Language factor	Language barrier affects H.E.	<i>The main barrier is the language barrier. For us as expatriates, we have a language barrier, so from the beginning why not include language in the orientation curriculum, we are trying our best to learn your language.</i>	15/FL/NS /M/sup
	Language factor	Language barrier affects H.E.	<i>Language is the main problem, if they cannot understand, we cannot explain in person, we cannot speak Arabic.</i>	16/FL/NS /M/sup

	Language factor	Language barrier affects H.E.	<i>The main problem is the communication barrier, as for me I can talk nicely, but I am not fluent enough to explain everything.</i>  <i>We need support from the administration, for example they can provide an interpreter to deal with the language barrier.</i>	17/FL/NS/M/HE
	Language factor	Language barrier affects H.E.	<i>What are the learning needs related to knowledge of skills that you would like to be educated about to have better HE...</i>  <i>First, there is the language barrier, it is very difficult for us to communicate with patients and relatives here.</i>	19/FL/NS/ST
	Nurses' knowledge	Nurses' lack of knowledge affects H.E.	<i>Lack of information on the part of nurses, that may be one of the barriers, you can say lack of knowledge of nurses.</i>	6/ml/ns/m/inst
	Psychological factors of individual nurses	Lack of interest in providing education affects H.E.	<i>There are nurses not interested in health education, they get many chances to provide education but they do not even intend to do so, so the patient is now in need of education.</i>	9/fl/s/st/ne
	Psychological factors of individual nurses	Lack of interest in providing education affects H.E.	<i>Some of the nurses do not provide health education when they have to, maybe they do not know how to do that ... <u>or maybe they are not interested</u> and so they delegate this task to others.</i>	(11/ml/ns/M)
	Psychological factors of individual nurses	Lack of interest in providing education affects H.E.	<i>We have educational programmes on health education but they are not implemented regularly because of a lack of understanding due to the language barrier, and sometimes they are not interested in attending.</i>	15/FL/NS/M/sup
	Psychological factors of individual nurse	Lack of interest in providing education affects H.E.	<i>Also there is a readiness to learn, some nurses are very interested to learn about health education but some others are not interested and are absent from education courses.</i>	18/fl/ns/M/HE
	Psychological factors of individual	Lack of interest in providing education	<i>The number one nurses barriers is nurses' readiness to learn, some of our staff do not want to get involved in this type of activity (health education training), so it's difficult for us to convene them. If they do not want to</i>	10/fl/ns/m/tns

nurses	affects H.E.	<i>participate, what is the use?</i>	
Psychological factors of individual nurses	Lack of interest/ personal problems affect H.E.	<i>In addition to work pressure, there are nurses' personal problems which affect their performance in health education, when a nurse has problems in her house or family, she is not going to give her best in education.</i>	5/FL/S/M/ED
Psychological factors of individual nurses	Personal problems affect H.E.	<i>Some nurses are affected by their personal problems at home, and that is reflected in a lowering of performance here.</i>	12/ML/S/SF
Psychological factors of individual nurses	Expatriates' lack of satisfaction with Saudi culture affects H.E.	<i>About culture, especially in Hail, we cover the face and there are restrictions; we cannot go everywhere, that also affects us working here, and it will affect our education as well.</i>	18/FL/NS/M/HE
Psychological factors of individual nurses	Expatriates' lack of satisfaction with Saudi culture affects H.E.	<i>The restrictive culture has a negative impact on expatriate nurses ... We cannot go outside and meet with others freely, it makes expatriate nurses dissatisfied with working here, that has a physiological and psychological impact on expatriate nurses and makes them unwilling to work or provide education in the country.</i>	18/FL/NS/M/HE
Psychological factors of individual nurses	Expatriate nurses worrying about Saudization	<i>This is not only about health education, it's about the individual security of staff nurses, you know there is ongoing Saudization, anytime my contract may be ended, if I know that I will be secure in my job for 10 or 15 years it will be better. If staff nurses feel secure in their job they will do their best.</i>	(6/ml/ns/m/inst)
Psychological factors of individual nurses	Expatriate nurses worrying about Saudization	<i>Now we are in a termination or Saudization process, what we need is someone passionate about our situation; the ministry has to tell us what time is still left. We will have some psychological problems or anxiety.</i>	17/FL/NS/M/HE
Psychological factors of individual	Managers' role affects H.E.	<i>I think the psychological status of nurses affects their practice of health education, also the role of head nurse affects positively or negatively her staff's performance of health</i>	13/FL/S/SF

	nurses		<i>education.</i>	
Theme3	Patient-related barrier	Subcategory	Participant's statement	Mentioned by
	Patient's condition	Patient's psychological status affects response to H.E.	<i>Some patients are in a denial stage, it is very hard to explain to them because they are in denial.</i>	17/FL/NS /M/HE
	Patient's condition	Patient's psychological status affects response to H.E.	<i>Some patients are in a psychological condition not appropriate for education. Education also depends in the patient and his education level.</i>	12/M/S/S F
	Patient's condition	Patient's medical & psychological status affects response to H.E.	<i>You know, because of our work, sometimes the person is not in the mood for talking or education, he is concerned with a cure or developments in his case, he does not want to hear anything from you, but when you have information to give, you are trying to educate the person who is in front of you.</i>	5/FL/S/M /ED)
	Patient's cooperation	Patient's refusal of H.E. linked to literacy	<i>We have some patients who do not cooperate enough, maybe because of their level of understanding of information, they can receive but they cannot comprehend.</i>	14/fl/ns/m /inst
	Patient's cooperation	Patient's refusal of H.E. linked to literacy	<i>Some patients are accepting of education, but some are against the teaching that we have.</i>	19/FL/NS /ST
	Patient's cooperation	Patient's refusal of H.E. linked to literacy	<i>Some patients refuse procedures or education, I think that is because of their education.</i>	17/FL/NS /M/HE
	Patient's cooperation	Patient's refusal could be related to ethnicity	<i>The type of people that we receive in hospital, due to cultural differences, make it difficult to standardise the education we provide, some ethnicities are not interested in education, you talk with them and they are they non-acceptors</i>	5/FL/S/M /ED

		differences	<i>of advice, they do not want to listen.</i>	
	Patient's cooperation	Patient's refusal could be related to ethnicity differences	<i>In other countries, people respect and accept education more than the people here.</i>	12/M/S/S F
	Patient literacy	Patient's response to H.E. linked to literacy	<i>There are many illiterate people and it is too difficult to make them understand.,</i>	18/FL/NS /M/HE
Theme4	Administrati on-related barrier	Subcategory	<i>Statement of the participant</i>	Mentioned by
	Dissatisfacti on with hospital management style	Inadequate manageme nt of nursing tasks affects H.E.	<i>There is great pressure on us here, we do other tasks not part of nursing ... what is the use of an administration department here if they cannot make or support nurses to be creative, competent.</i>	13/FL/S/S F
	Dissatisfacti on with hospital management style	Lack of updated educational resources affects H.E.	<i>For continuous medical education, I expected new information and updates, this is what I am expecting, it's not here.</i>	6/ml/ns/m /inst
	Dissatisfacti on with hospital management style	Inadequate manageme nt of hospital problems affects H.E.	<i>The administration needs to be more strict about some problems.</i>	18/fl/ns/ M/HE
	Dissatisfacti on with hospital management style	Inadequate manageme nt of hospital problems affects H.E.	<i>The administration has to limit the watchers, we cannot do anything because the watchers are contradicting us.</i>	19/fl/ns/st
	Dissatisfacti on with hospital management	Lack of motivation and support	<i>There is support but we need more support from the administration.</i>	17/FL/NS /M/HE

	style	affect H.E.		
	Dissatisfaction with hospital management style	Lack of motivation and support affect H.E.	<i>The is no motivation from the hospital administration, while the nursing department depends on the manager on duty, some are supporters and motivators, some are not, they break you down.</i>	12/M/S/S F
	Dissatisfaction with hospital management style	Lack of motivation and support affect H.E.	<i>Absolutely no support from the administration department ...  I am a new graduate and employed nurse (one year's experience) and they ask me to be duty manager, I refuse because I do not have experience in that.</i>	12/M/S/S F
	Dissatisfaction with hospital management style	Lack of motivation and support affect H.E.	<i>There is no support here at all, the motivator managers are quite few.</i>	5/FL/S/M /ED
	Dissatisfaction with hospital management style	Clarity of nursing policy affects H.E.	<i>There is inadequate management of nursing policies.</i>	6/ml/ns/m /ins
	Dissatisfaction with hospital management style	Clarity of nursing policy affects H.E.	<i>Also, the work policies are not clear, if the nurses do not know their role boundaries they will never be competent in their work, that will limit their steps as they worry about making mistakes.</i>	5/FL/S/M /ER
	Dissatisfaction with hospital management style	Managers limitations affect H.E.	<i>The nurse managers encourage us to do regular nursing tasks regardless of health education, that is not good.</i>	9/fl/s/st/n e
	Dissatisfaction with hospital management style	Managers limitations affect H.E.	<i>There are some managerial problems that affect health education, I think there is a need to put the right person in the right position, the head of health education is not competent in the needs of the education department ...  One suggestion is to solve the language barrier, education is very important; from elementary school they must learn English, as an instructor I am not qualified to have this profession here because there is a problem</i>	11/ML/N S/M/IN

			<i>with speaking, and even comprehending, and even writing, and that is my observation.</i>	
	Dissatisfaction with hospital management style	Mangers limitations affect H.E.	<i>For health educators or instructors here they have to undergo some training. But saying and reminding, that will not help them, they have to attend courses, symposiums, in order to understand what kind of work, what kind of teaching that they need to provide, benchmarking to use in their hospitals.</i>	14/FL/NS /M/INS

**Appendix (7) Summary of qualitative data analyses of the strategies for developing culturally sensitive health education.**

Strategies at the hospital level	Theme	Subcategory	Statement	Mentioned by
Theme1	Family role in Saudi hospitals	Family have to be part of H.E. (positive role)	<i>Health education should involve the family. Patients most of the time visited by their family</i>	6/ml/ns/m /inst
	Family role in Saudi hospitals	Family are part of H.E. (positive role)	<i>We used to inform parents and relatives about health education,</i>	18/FL/NS /M/HE
	Family role in Saudi hospitals	Family are part of health education (positive role)	<i>Nurses do not only concentrate on patients, they also concentrate on relatives because they are always there. For continuous education, the family need to be involved.</i>	15/FL/NS /M/sup
	Family role in Saudi hospitals	Family have to be part of H.E. (positive role)	<i>We have to include relatives, mother and father, in health education.</i>	17/FL/NS /M/HE
	Family role in Saudi hospitals	Family are part of health education (positive role)	<i>We also involve the families in education, not just the patient.</i>	14/FL/NS /M/IN
	Family role in Saudi	Limiting Saudi cultural norm (many watchers)	<i>Health education depends on patient and family willingness, we have at the bedside the patient's watchers or relatives, sometimes</i>	19/FL/NS /M/HE

	hospitals	visiting patients) that disturbs H.E. & nursing care	<i>more than one or two watchers, they interfere with the education we provide. The first kind of support is to limit the watchers, we sometimes have problems with them when they are contradicting us.</i>	
	Family role in Saudi hospitals	Limit unnecessary watchers & control visiting times that disturb nursing care	<i>I know it's common to see a large number of relatives beside the patient, even during resuscitation, I do not blame them because it's part of the culture, but there is work and procedure has to be followed ... there is inadequate management of such issues.</i>	(6/ml/ns/m/inst)
	Family role in Saudi hospitals	Saudi family cultural norm (many watchers & visitors for patient) disturb nursing & H.E.	<i>I have seen family during resuscitation, for more than thirty months, beside nurses, if they do not see you do anything, they make a report against you.</i>	6/ml/ns/m/inst
Strategies at level of healthcare system	Themes	Subcategory	Statement	Mentioned by
Theme 2	For the gender-segregation cultural value	Action inside hospitals, encourage nurses	<i>Why we do not mix males and females and make them work together in one department, this could solve the problem of the gender-segregation cultural norm by making sensitive nurse start accepting the nature of nursing work.</i>	13/FL/S/S F
	For the gender-segregation cultural value	Action inside hospitals, encourage nurses	<i>We have to explain that it is no problem to work with males, they are our colleagues, and it's our job.</i>	16/FL/NS /M/sup
	For the gender-segregation cultural value	Action inside hospitals, encourage nurses	<i>Health education will be limited because of Saudi culture and gender-segregation roles. We are nurses, their should be no restrictions because of gender segregation and we have to practise this one.</i>	15/FL/NS /M/SUP
	For the gender-segregation cultural value	Action outside hospitals, nursing education	<i>Working with mixed genders in nursing has to be clear from the beginning of nursing study.</i>	8/FL/S/M /ST



	For the gender-segregation cultural value	Action outside hospitals, nursing education	<i>It should be stated from the beginning to all new staff nurses that nurses works with males and females despite the culture.</i>	5/FL/S/M/ED
Theme2	For the gender-segregation cultural value	Action outside hospitals, community education	<i>There has to be education outside hospitals, in the community, to decrease the impact of the gender-segregation cultural norm. We should do awareness programmes in the community</i>	12/M/S/SF
	Involving expatriates	Involvement in decision-making	<i>The regional office has to include expatriate nurses in policymaking, and collection in their practice.</i>	(6/ml/ns/m/inst) Policy
	Involving expatriates	Involvement in decision-making	<i>From the beginning, there is big hole here, there is no involvement of expatriates in hospitals, the government must actively involve expatriates in solving health-education problems.</i>	11/ML/NS/M
	Involving expatriates	Involvement in decision-making.	<i>I thinks we need to involve the expatriates more with the Saudis.</i>	10/fl/ns/m/Inst
	Involving expatriates	Teaching Saudis	<i>We need involvement between Saudis and expatriate nurses to learn from each other, the Saudis can learn from the expatriates.</i>	12/M/S/SF
	Involving expatriates	Teaching Saudis	<i>The expatriates can teach Saudi nurses the basics of English and the concepts of health education.</i>	10/fl/ns/m/tnsi
	Involving expatriates	Teaching Saudis	<i>They have very good education about health education, they can help and educate other nurses, such as Saudis</i>	14/fl/ns/m/inst
	Distribution of health promotion	Cooperation with healthcare centres	<i>We cannot reach the very remote areas but we can ask for help from public healthcare centres, why don't we start there?</i>	15/FL/NS/M/sup
	Distribution of health promotion	Cooperation with healthcare centres	<i>From my point of view, there are peripheral centres, the nurses there can provide health teaching for patients so they can learn before coming here.</i>	19/FL/NS/ST
	Distribution of health promotion	Cooperation with healthcare	<i>Outside we can use the media, the department of health can use media to raise awareness of the use of non-medical treatment. Community</i>	14/fl/ns/m/inst

	centres. Using the media	<i>services and nurses in peripheral areas can provide education to the household ... Community services are closer to families, social education has to be included in their studies.</i>	
Distribution of health promotion	Using the media	<i>Even TV, media and newspapers can be used to educate nurses and the community.</i>	18/FL/NS /M/HE
Distribution of health promotion	Using the media	<i>Health education should start at home, we can use media, peripheral health centres can do that, we also need cooperation from others.</i>	12/ml/s/sf
Distribution of health promotion	More health promotion towards the community	<i>I think the patients here need more dissemination of health promotion and general awareness, I think the dissemination of health promotion here is not like in other countries,</i>	17/FL/NS /M/HE
Distribution of health promotion	More health promotion towards the community	<i>Sometimes you see patients with herbal medication, that is their belief. If they have knowledge with regard to that, they will not use it. Sometimes this herbal medication is not prepared nicely, so another complication will arise.</i>	15/FL/NS /M/sup
	Prioritize H.E. as a primary task in nursing policy	<i>My wish is that health education becomes an essential element of our nursing education, also we need more training courses in health education ... The problem is that they do not consider health education to be an essential task.</i>	9/FL/S/S T/NW