EMPLOYERS' AND EMPLOYEES' PERCEPTIONS REGARDING PROMOTION OF HEALTH AND WELL-BEING IN THE WORKPLACE

By

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ABBREVIATIONS

GOK	Government of Kenya
KDHS	Kenya Demographic Health Survey
KIPPRA	Kenya Institute for Public Policy Research And Analysis
KNBS	Kenya National Bureau of Statistics
KRCHN	Kenya registered Community Health Nurse
LMIC	Low - Middle Income Country
MOH	Ministry of Health
NCDs	Non- Communicable Diseases
OSHA	Occupational Health and Safety
PHC	Primary Health Care
SSA	Sub-Saharan Africa
UHC	Universal Health Care
WHO	World health organisation

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ABSTRACT

Background

The workplace has been identified as a suitable setting where adult populations can be reached for health promotion and prevention of disease. However, little is known about the workplace health and well-being environment in Kenya. The country is currently suffering from a high burden of non-communicable disease burden and has identified prevention as a key action to reduce incidence. This study aimed to explore employees' and employers' perceptions of health and well-being in the workplace to understand what health and well-being mean to them, how employers and employees influence health and well-being in the workplace and perceptions regarding the role of organisations in enhancing health and well-being for employees.

Methodology

This was a qualitative study using semi-structured interviews. Participants were drawn from two urban organisations in Nairobi-Kenya. A total of eight employers and nine employees participated in the study.

Findings

Three themes and seven subthemes were generated. The first theme dealt with meanings of health and well-being, where participants revealed that being free from disease, maintaining a healthy dietary lifestyle and being active was important to them. The second theme was about perceived Influences in the workplace that impacted employee health and well-being, including peer support, role models, and access to health information. The third theme dealt with enhanced workplace well-being, which included the perceived role of organisational support for employee health and well-being.

Conclusions

Perceptions of health and well-being are multidimensional and contextual, where interplay and interconnectedness between individual, inter-personal and organisational levels exists. Employers recognise the risks of non-communicable diseases and the impact on employee productivity, absenteeism and presenteeism. Employers attempt to offer resources like subsidised gym memberships and health talks in a bid to enhance health and well-being at work, but the capacity to establish sustainable workplace health and well-being programmes

is lacking. Peer support and role models are important in encouraging employees to participate in health and well-being activities. There is also no integration of the healthcare sector with workplaces to facilitate sustainable outcome-based health and well-being enhancement in the workplace. However, the study shows that workplaces have great potential and are suitable sites for health promotion and disease prevention. In this regard, a model for the integration of community health nursing practice with workplaces for health and well-being enhancement is proposed to guide future workplace health promotion design and implementation.

CHAPTER ONE

INTRODUCTION AND BACKGROUND TO THE STUDY

Introduction

My motivation for this study was influenced by the current health and well-being situation of the Kenyan population and my desire to seek solutions that are appropriate for the Kenyan context. Kenya, a low- and medium-income country (LMIC), is experiencing an exponential increase in Non-Communicable Diseases (NCD) burden, with incidence set to increase by 27% by 2030 (Wanjau et al., 2021; Ongosi et al., 2020). Currently, NCDs account for 50% of patient admissions in Kenyan hospitals and 55% of hospital deaths (Ammoun et al., 2022; MOH, 2021). In addition, NCDs account for 39% of all deaths in Kenya. Beyond the mortality and morbidity impact created by NCDs, the Kenyan population suffers a huge economic burden, with 28% of household income going to the management of NCDs. According to Mwangi et al. (2020), in 2015/2016, household income contributed to 39% of overall national health expenditure. Cardiovascular diseases, cancers, diabetes and respiratory diseases are the most common NCDs.

Modifiable lifestyle behaviours like physical inactivity, unhealthy diets and alcohol consumption increase the risk of NCDs. Health promotion and prevention are, therefore, key to enhancing healthy lifestyles among Kenya's populations and mitigating the risks. Kenya is therefore increasing efforts to establish Primary Healthcare (PHC) initiatives as part of universal healthcare (UHC), which ensures equitable and accessible healthcare services. Primary healthcare is the first contact with the population for healthcare services, giving the earliest opportunity for health promotion and prevention of disease.

The workplace has become recognised as a suitable setting for health promotion activities to reach the adult population in worksites with the objective of influencing behaviour and

minimising the risk of chronic disease (Ogata, 2019; Abraham, 2019; Phiri et al., 2015). However, there is slow progress being made in Kenya and other countries in the Sub-Saharan Africa (SSA) region, despite health promotion in the workplace having been established in other parts of the world over the last forty years (Sureshkumar et al., 2023; Subramanian et al., 2017). This study, therefore, explored perceptions of health and well-being in the Kenya workplace, where evidence-based preventive measures can be implemented with regard to mitigating the rising burden of NCDs.

Background

The burden of non-communicable diseases

Non-communicable diseases (NCDs) comprise several chronic diseases, including cardiovascular diseases, cancers, diabetes and respiratory diseases. The burden of NCDs continues to increase around the world and is responsible for 74% of deaths and disability globally (Allen et al., 2023; Bennett et al., 2020). According to WHO (2023), 17 million people die below 70 years of age from NCD-related issues, and 86% of those premature deaths are from LMIC countries. Globally, cardiovascular diseases account for 17.9 million deaths, followed by cancers at 9.3 million and chronic respiratory diseases at 4.1 million (WHO, 2023). The burden of NCDs continues to be a big challenge for countries like Kenya, with 80% of NCD-related deaths occurring in LMICS and accounting for 44% of deaths worldwide (Gouda et al., 2019; Coates et al., 2020). In Sub -Saharan Africa, the prevalence of NCDs is expected to exceed communicable, maternal and neonatal-related mortality and morbidity by 2035 and will pose a significant burden to Governments and individuals in LMICs (Muller et al., 2024). In this regard, the WHO has developed a global strategy and action plan for the prevention and control of NCDs (Haque et al., 2020).

In Kenya, it is projected that by 2030, NCD incidences will have increased exponentially. Currently, NCDs account for 27% of total mortality, and this increases the burden on an

already overburdened healthcare system (Mensah et al., 2020; Kiragu et al., 2022). Kenya, like other countries in SSA, is also undergoing rapid urbanisation and with it, epidemiological transitions such as socioeconomic transformation, nutrition transition and an increase in an ageing population, all of which are contributing factors to the rise of NCDs, especially cancer, diabetes, and hypertension (Onyango et al., 2018; MOH, 2015; WHO 2013). Data from the Kenya Health Management Information system shows that 50% of total hospital admissions and over 55% of deaths are due to NCDs (Wanjau et al., 2021; Ongosi et al., 2020). Further to this, future health projections for Kenya show that there is a gradual decrease in communicable diseases, and this may continue to reduce by 14% by 2030. However, NCD projections estimate an increase of NCD-related death by 25%, which will be a challenge as the WHO global action plan is to reduce NCD-related mortality by 25% (Ngaruiya et al., 2021; Shiroya et al., 2017; MOH 2015; WHO 2013)

Key health indicators cited are non-communicable conditions, which include cardiovascular diseases (CVDs), cancers, respiratory diseases, diabetes, psychiatric conditions, and congenital anomalies, which represent an increasingly significant burden of ill health and death in the country (MOH, 2015; Wamai et al., 2018). In Kenya, NCDs represent 50–70 per cent of all hospital admissions and up to 50% of all inpatient mortality (MOH, 2021; KNBS, 2022). Kenyan mortality related to diabetes is 20000 annual deaths, while cancer-related deaths account for 13% of global mortality. Autopsy studies suggest that 13% of NCD deaths in Kenya are related to CVDs.

HIV/AIDS is still estimated to cause the highest proportion of deaths and lost disability-adjusted life years (DALYs), but prevalence is on a downward trend, which is currently estimated to be 5.6%, and this trend is attributed to the implementation of an aggressive HIV control strategy (WHO, 2014). However, the contribution of NCDs to DALYs has increased

from 20% in 2004 to 25% in 2012, with NCDs accounting for 31% of all deaths by 2015(Ammoun et al., 2022.)

The percentage of total government expenditure in relation to health has remained constant at about US$ 78 per capita as per the National Health Accounts 2015 (KIPPRA, 2018). This falls short of the WHO recommended rate of US$ 86 per capita, which is the estimated minimum requirement to provide basic health services to a population (KIPPRA, 2018). The Kenyan government, in conjunction with the ministry of health and related agencies, have outlined national health priorities in line with Kenya's Vision 2030 (GOK, 2008), and a key national health priority is the reduction of the burden of non-communicable diseases. According to the NCD Countdown 2030 report (Watkins et al., 2022), LMIC countries are the most affected yet have made little progress in mitigating the impact of NCD mortality and morbidity. The UN Sustainable Development Goal(SDG) target 3.4 calls for governments to bring down NCD-related mortality and morbidity rates by a third by 2030 (Muller et al., 2024). This can be achieved by countries identifying trends and local contexts to engage in cause-specific mortality prevention interventions.

In view of this, the WHO, in conjunction with the Kenyan government, have identified objectives to reverse these trends and reduce NCD-related morbidity and mortality through health promotion. The strategies agreed on in conjunction with WHO and the UN include reversing the rising burden of non-communicable conditions, injuries, violence, and disability (Banatvala et al., 2023; MOH, 2021). The other strategy is to improve health outcomes and embrace healthy lifestyles in a supportive and enabling risk-mitigating environment. Therefore, there is a government commitment and potential to engage in upscaling health promotion where appropriate evidence-based research is provided to guide policy.

The Kenyan government have developed various policies to promote the prevention of NCDs. Kenya, for instance, hosted the Nairobi call conference in 2009, where African countries committed to enhancing health promotion for the prevention of NCDs (WHO, 2009; Catford, 2010). However, preventive programmes targeting lifestyle-related diseases are lacking, and research related to NCDs seems to focus more on secondary prevention of specific diseases rather than primary prevention (Kraef, 2020). The challenge of translating policy to implementation remains, where actions agreed upon during the Nairobi call for action conference are yet to be fully realised (Shiroya et al., 2019; Wanjau et al., 2021). Challenges of translating policy into action may lie in the lack of policy grounded in the African context, related to poor involvement of communities who are experiencing the burden, lack of resources and funds for preventive actions and failure to re-orient prevention from curative services to primary health settings like workplaces, schools, churches (Bukhman et al. 2020; McCollum, 2018).

Promoting health and well-being in the workplace has become increasingly crucial to the socioeconomic development of low to middle-income countries like Kenya, which are experiencing an increase in worker disease burden (McCollum et al., 2018; KIPPRA, 2021). However, there is slow progress being made in Kenya and other countries in the Sub-Saharan Africa (SSA) region, despite health promotion in the workplace having been established in other parts of the world over the last forty years (Sampson et al., 2013).

The continued rise in the incidence of non-communicable diseases has heightened the need to scale up health promotion and disease prevention activities. WHO data shows that 85 % of deaths due to NCDs are in Low to Middle-Income Countries (LMICs), with cardiovascular diseases, diabetes, and cancer having been identified as the major cause of death in SSA (WHO, 2016). Physical inactivity, unhealthy diets and alcohol consumption are some of the major risk factors of NCDs, yet they are highly modifiable (WHO, 2014; Wamai et al., 2018).

Initiatives geared towards mitigation of this development in NCD trends in SSA require effective health promotion and preventive interventions among well-populated populations, such as employers and employees at workplace sites (Bigna & Noubiap, 2019).

The workplace as a health and well-being setting

The World Health Organisation (WHO) describes a healthy workplace as one where employers and employees work together to continually enhance health, safety, and well-being to improve productivity (WHO, 2016; Wanjau et al., 2018). WHO in 2013 identified workplaces as the best options for the prevention and control of non-communicable diseases (WHO, 2013; Penalvo et al., 2021). According to WHO, workplace well-being provides opportunities to enhance health and well-being with the potential to identify individual characteristics and behaviours that impact their health and well-being (WHO, 2012).

The workplace is considered an appropriate setting for promoting health and well-being, whether in the interest of worker protection or disease prevention (Ariyanti et al., 2020; Quirk et al., 2018; Sorensen et al., 2017). Employers utilise workplace wellness programmes to reduce the cost of providing healthcare by creating a healthy and safe work environment, reducing absenteeism, and increasing productivity (Kemp & Fisher, 2022; Payne et al., 2018; Schouw et al., 2018). According to Kowalski & Loretto (2017), employee health and well-being are also becoming increasingly important to organisations, not only for the benefit of workers but also for overall organisational productivity and performance. Workers' health and well-being go beyond health and safety and interact with workers' personal lives and communities to impact productivity, health, and happiness (Grossmeier et al., 2020; Kordsmeyer et al., 2022). The workplace, therefore, plays a major role in the daily life of individuals and is inter-related and intertwined with that of individuals day to day interaction with peers and the organisational work environment (Passey et al., 2018; Michaels & Greene, 2013; Lankford et al., 2013).

The workplace as a suitable setting for wellness programmes is increasing due to growing incidences of NCDs, which greatly impact the workplace in terms of associated medical costs, loss of productivity and chronic absenteeism (Sigblad et al., 2020; Smith et al., 2015; Babu et al., 2014). Most of the adult population spends at least 40 hrs per week in the workplace, and this makes it a setting where opportunities for health promotion can be utilised to identify and prevent health risks through enhancing lifestyle changes (Robroek et al., 2021; NCD Alliance, 2017).

In addition, WHO (2014) and Dooris (2018) have established that the workplace, along with other settings like schools, is suitable for health promotion in the 21st century. The rationale employers often give for their support of health promotion includes an opportunity to prevent illness and disability and reduce associated absenteeism, reduce healthcare costs, and improve the general morale and well-being of employees (ILO, 2021; Mungania et al., 2016). The workplace, therefore, offers a large and diverse population group to work with for the enhancement of health and well-being.

The other reason why the workplace offers an ideal setting for health promotion and disease prevention is the recognition that employment is an important determinant of health and well-being (Armenti et al., 2023; Pham et al., 2020; WHO, 2012). In this case, working in a healthy and safe environment is seen as key to the health of the individual and the population at large (ILO, 2021). Issues like sickness, absence and disability at work have been related to inadequate support for chronically ill employees (Smith et al., 2015). The WHO reiterates the importance of workplace programmes in support of employees with chronic health challenges, which they argue requires a collaborative effort from community stakeholders in settings like workplaces (WHO, 2020).

Additionally, there are factors associated with NCDs among the workforce globally, including sedentary lifestyles and inactivity, dietary habits, mental health and stress and ageing (Nyirenda, 2016). Conversely, healthy workplaces that offer an environment with structured health, safety, and well-being create an opportunity for easy adoption of healthy behaviours that can ripple to employees' wider community interaction (Bosu, 2015; Arena et al., 2013). Exploring the workplace is therefore necessary to understand how employer and employee perceptions of health and well-being may have shaped their health behaviour within the work environment (Onyango et al., 2017).

The workplace directly influences the physical, mental, and social well-being of workers WHO (2020). Moreover, workers' perceptions of health and well-being are likely to have an impact on the societies they live in as their health behaviour and influences at work have a ripple effect (Bell et al., 2022). Exploring health and well-being at the workplace is, therefore, an eye-opener for employees' work worlds and the impact this has on their health perceptions, behaviours, and decisions they make regarding health and well-being.

The Kenyan government has previously utilised workplaces in the primary prevention and control of HIV/AIDS, where nurses were the main caregivers (Joshi et al., 2014). My role as a nurse is in community health, and in my area of practice, nurses continue to be the key drivers of successful HIV prevention programmes at the primary level and have well-established strategies that remain useful in primary health (Tesema, 2020; Crowley & Meyers, 2015). Now Kenya is faced with a rising burden of NCDs, and the workplace is viewed as a suitable setting for preventive programmes to take root, with nurses identified as being at the forefront of primary prevention (Lekoubou et al., 2010). However, little research has been done to explore the current perceptions of the health and well-being of employers and employees and inform them of such an initiative.

Translation of national policies and guidelines and the assessment of settings like workplaces where preventive actions can be started is still a challenge (Kraef, 2020; Shiroya et al., 2019; MOH, 2015). There is a call for policymakers to diversify health promotion and disease prevention activities and to take advantage of workplaces to roll out initiatives, which will ease the burden on the public sector and provide a means for mitigation of the rising burden of chronic disease (Budreviciute, 2020; Juma et al., 2018).

Country of research focus

The study was carried out in Kenya- a Low to Middle Income (LMIC) country in Sub-Saharan Africa. Kenya is situated in the eastern part of Sub-Saharan Africa and is divided into 47 administrative counties (KDHS 2022, MOH-KE, 2021). According to the 2019 Kenya population census, the population of Kenya was 47.5 million, but it is currently estimated at 53 million, with a life expectancy of 63.4 years (KNBS, 2022; World Bank, 2019). In terms of governance, Kenya is divided into 47 administrative counties within a decentralised form of government that was established under the new 2013 constitution. Counties are responsible for health planning, while the central government gives broad health policy directions in keeping with Kenya's Vision 2030 (GOK, 2007; Mwenzwa & Misati, 2014).

The Kenya government recognises that good health is a prerequisite to socio-economic development. The Kenya government regularly releases policy documents and successive national development plans to give direction and guidance to various public and private agencies involved in managing the health of Kenyans. Key documents include the Kenya Health Policy 2014 – 2030 from the Ministry of Health (MOH) Kenya (MOH, 2014), the Kenya Health Bill 2018 (GOK, 2016) and the Government of Kenya Vision 2030 (GOK, 2007). In general, these policies give direction to ensure that health services meet the basic needs of the population and that health facilities should be situated within reach of all Kenyans, with a focus on preventive, promotive, rehabilitative, and curative services (Mauti

et al., 2019; KNBS, 2022; GOK, 2007). The Kenya health sector is governed in keeping with the Kenya constitution (Articles 10 and 232, together with Chapters 6 and 12 of the Constitution), under which the Kenya health policy outlines the national agenda for health development.

According to Kenya's health policy, the healthcare system is structured as a referral system where most of the population access care in primary health centres and are referred to county hospitals or national hospitals for more advanced care through a referral system within six levels of care. Under the Kenya Health Act No. 21(GOK, 2017), health services include Level 1: Community health services; Level 2: Dispensary/clinic; Level 3: Health centre; Level 4: Primary hospital; Level 5: Secondary hospital and Level 6 as shown in Fig 1.1 below.

Kenya Registered Community Health Nurse (KRCHN)

The KRCHN describes a nurse with comprehensive competences that include general nursing, community health and midwifery. This level of training prepares a nurse to offer promotive, curative, preventive, rehabilitative and palliative care across the lifespan. The community health-related competencies include health promotion, disease prevention, disease management and policy development. The decision to develop this cadre and ensure a nurse at the entry-level has a comprehensive set of competencies was implemented in 1987 at a time when Kenya was undergoing a structural adjustment programme to improve its economy (Rono, 2002; Ahmed et al., 2024). A comprehensive nurse would reduce the cost of human resources for health, especially because Kenya was at the time a low-income country and needed to reduce the national wage bill by 50%. Having a comprehensive nurse was also necessary because there were very few medical doctors to cover primary health. So a nurse with more competencies would have more autonomy and capacity in clinical decision-making for diagnosis and referral at the primary care level. So, instead of having three

different cadres of nurses, having one nurse with requisite competencies was seen as an advantage. KRCHNs are, therefore, the key link between community and health services and are first responders for health services at the PHC level. Nurses represent the highest number of healthcare workers at 58% with only 7% of doctors in the public sector (Okoroafor et al., 2022; Appiagyei et al., 2014). Figure 1 shows how the KRCHN is situated in the Kenya health service system, with competencies utilised at each level.

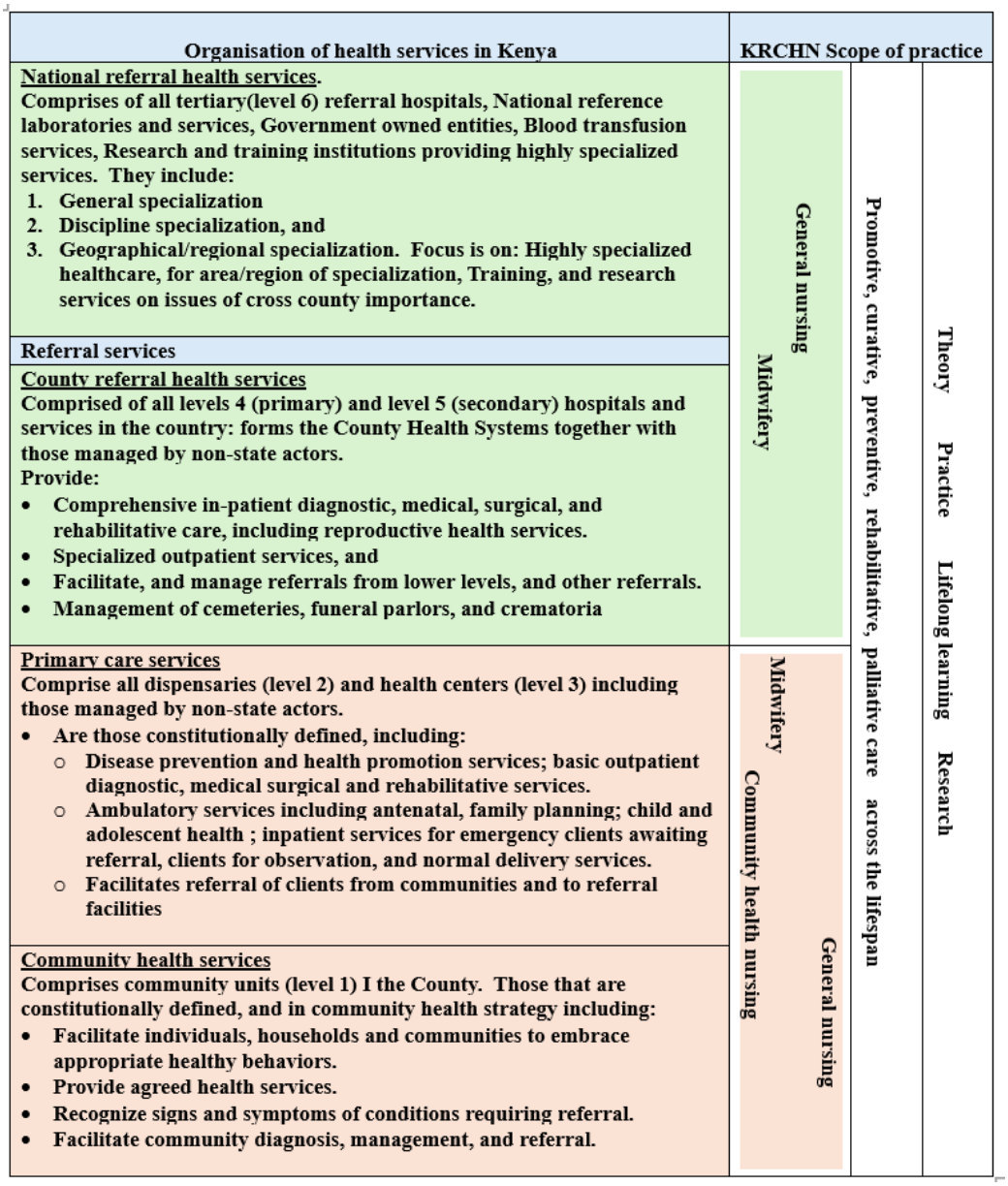

Figure 1 Situating KRCHN in Kenya health services

Statement of the problem

The focus of worksite health in Kenya has remained largely on occupational safety (OSHA) issues, such as those regarding injury prevention (Schouw et al., 2018). The OSH movement in Kenya began in the 1950s mainly to address safety issues in the industrial sector. The first regulatory act was adopted from the British Factories Act and was later updated in 1990 to become the Factories and other places of work Act (Tait et al., 2018). In 2007, Kenya enacted the Occupational Health Safety and Health Act (OSHA) and the Work Injury Benefits Act (WIBA) (Nyamboki et al., 2021). The directorate of Occupational Safety and Health Services (DOSHS) is responsible for operationalising the OSHA Act under the Ministry of labour (Ndegwa et al., 2014).

In this regard, organisations in Kenya have developed robust OSHA programmes, and the country now has well-established legislative policy directives for employers to comply with OSHA regulations (Sembe & Ayuo, 2017). However, in the early 2000s, in response to the United Nations Declaration of Commitment on HIV/AIDs by the global community (UN, 2001), prevention and control of HIV/AIDS became a government priority. This led to the workplace becoming an area of focus for establishing HIV-related prevention and control programmes that would reach defined populations in formal employment (Ndinda et al., 2018).

As a result, the concept of workplace health and well-being has, since then, mainly focused on the prevention and control of HIV/AIDS and its related illnesses (Ngeno & Mwuathe, 2014). Although the enhancement of prevention and control of HIV infection through focused wellness programmes in the workplace has contributed to the reduction of related incidence and mortality, other health challenges, especially those related to NCDs and their risk factors among workers, have not been adequately addressed. As a result, workplace health and well-

being programmes in Kenya are not yet established in a structured manner to benefit the overall scope of worker well-being (NCD alliance, 2018; Sampson et al., 2013).

Information about health and well-being programmes in Kenya is low and focuses mainly on occupational safety issues in major organisations in the private sector. Where they exist, the programmes offer single interventions like payment for workers to utilise gyms to increase activity and exercise or to pay for health insurance for workers. The initiatives are, therefore, carried out without a framework or preliminary research to guide their implementation (Donnelly, 2013; Masekameni, 2020). In addition, little research has been done on workplace health and well-being to inform employers and working communities about what it entails. This has also been the case in other parts of Africa, e.g., South Africa, where the promotion of health and well-being has mainly focused on issues to do with hazardous occupational exposure and HIV prevention programmes rather than other preventable lifestyle-related health problems such as cardiovascular diseases (Ndinda et al., 2018).

Although there has been some form of workplace health and well-being activity, research in this area remains inadequate to inform further development of health and well-being in Kenya (Tuwai et al., 2015). Research regarding health and well-being has not been forthcoming, and therefore, there is less evidence-based information on how to plan and design future NCD prevention-related initiatives in the workplace. There is also not enough exploration done regarding the status of those organisations that currently have some form of workplace health and well-being initiatives and the impact this may have on the general health and well-being of their employees. Understanding health and well-being trends in the workplace from employers and employees is critical for national planning and implementation of preventive mechanisms as well as evidence-based interventions (Rodriguez Espinosa, 2020).

To date, therefore, not enough research has been done to adequately inform employers in Kenya, and this may impact workplace health and well-being, especially when fragmented approaches are utilised to address health and wellness. Developing a research base may offer evidence that is crucial in the prevention of NCDs. Moreover, NCDs are determined by several factors, such as physical activity or dietary lifestyle and tackling one factor at a time is not effective. Approaches more likely to have an impact will be those that favour multi-sectoral, multifactorial, and multidisciplinary health promotion (Juma et al., 2018). This NCD burden, demands urgent attention. There is a need to identify lower-cost prevention programs targeting worksites to relieve mainstream healthcare institutions in Kenya, which are already under pressure. However, to inform such decisions, there is a need to investigate the Kenyan workplace environment so that appropriate evidence-based health and well-being strategies can be developed (Mensah, 2020; Wanjau et al., 2019). There is still little known about the role played by organisations in promoting health and well-being in the workplace, the content and context of workplace health and well-being in Kenya, and the perceived benefits, if any, of what has been attempted so far. This poses a challenge to attempts to scale up workplace health promotion initiatives (Wekesah, 2020).

In Kenya, many KRCHN nurses work in organisations as occupational health and safety officers. This is because there is not an established speciality of occupational health specialists, therefore many organisations in Kenya engage nurses to manage occupational health and safety and ensure compliance with OSHA regulations. Nurses are viewed as suitable for OSHA management because of the nature of their training. Nursing education in Kenya is comprehensive and educates nurses in general nursing, midwifery, and community health to enable them to adequately deal with health problems as first responders in the community and also to initiate preventive primary programmes (Wakaba et al., 2014; Appiagyei et al., 2014). This approach is used because Kenya has low doctor-to-patient

ratios, which means the most accessible health worker is often a nurse (Sousa et al., 2014; Pozo-Martin et al., 2015). Health promotion is part of nursing practice and because of this nurses working in organisations often extend their role beyond occupational health and provide preventive and curative services as part of their occupational health role (Kemppainen et al., 2012; Gross et al., 2010).

However, little research has been done in Kenya to understand health and well-being in the workplace to inform nurses and organisations on the ground. Nurses require this evidence base to inform their practice and enable them to design holistic health promotion programmes in the workplaces where they can help improve worker health outcomes. Consequently, there are no existing guidelines or frameworks to guide research and the establishment of workplace health promotion programmes. This means that currently, preventive actions remain focused on addressing single health problems like HIV/AIDS.

Purpose of research

This study aimed to explore employers' and employees' understanding of health and well-being in Kenya's workplaces and how this has influenced their perceptions of workplace health and well-being. Through the qualitative approach, it was important to explore and understand employees' perceptions, views, and interpretations of health and well-being in the workplace context. Interacting with employers and employees beyond the confines of a hospital or academic health setting enabled me to incorporate everyday life interactions at work with concepts of health and well-being and perceptions of workplace well-being (Rodriguez Espinoza et al., 2020). Exploring the perception of health and well-being at work also provided an opportunity to understand the role of employers and employees in enhancing well-being in the workplace environment.

Research objectives

1. To explore employers' and employees' perceptions of health and well-being concepts.
2. To explore how employers' and employees' perceptions of health and well-being impact workers in the organisation.
3. To explore employers' and employees' perceptions of how the organisation can improve health and well-being in the workplace.

Significance of the study

Given that most health and well-being research is from outside Kenya, exploring the Kenyan workplace validates the interpretation perceptions of employees within the Kenya context. Understanding the Kenya context with regard to workplace health and well-being will enable us to have evidence that can be benchmarked with what has already been done in other parts of the world.

Nurses play a key role in the development of healthcare systems and are the largest group at the frontline healthcare provision among other health professions (WHO, 2017; WHO, 2012). Nursing research is key to providing nurses with accurate information and opportunities to address the prevention of non-communicable diseases and improve well-being in community settings such as workplaces (Klopper & Gasanganwa, 2015; Berthelsen et al., 2017). However, nursing research from Kenya and Africa, in general, on NCDS prevention has not been forthcoming in informing health promotion nursing practice. Consequently, Kenyan nurses often rely on grey literature or use evidence derived from high-income countries that may not be fully applicable to the LMIC context (Sun et al., 2016; Dohrn et al., 2015). It is expected, therefore, that this study will inform nursing practice about health and well-being in the workplace.

The findings of this research will create a platform for nurses regarding the role nurses can play in designing evidence-based programmes in community settings such as workplaces where health promotion and prevention gaps remain. The study will also add to the nursing research body of knowledge in the prevention of NCDs through engaging communities in workplace settings to inform the contextualisation of workplace health and well-being programmes in Kenya.

This study provides new insights regarding workplace health and well-being in Kenya and perceptions of employers and employees regarding health and well-being potential in the workplace context. Such information will be useful not only for nursing but also for multidisciplinary entities like occupational health specialists, community leaders, and other stakeholders who have a role in health promotion and chronic disease prevention in Kenya, as well as for informing national policy and direction in this area.

Methodological orientation and research position

A qualitative research approach was used to explore the perceptions of employers and employees regarding health and well-being in the workplace. Through a qualitative approach, the researcher was able to understand workplace health and well-being from the participants' perspective, as well as the interpretation and meaning of health and well-being concepts.

The researcher is a nurse working with communities in Nairobi County, Kenya. The qualitative approach in nursing research underscores the importance of making connections with individuals under our care and thoughtfully considering their shared perceptions, views, and attitudes about their work world (Burns & Peacock, 2018). Nurses also value the context within which the individual interacts with others and seek to understand where they are coming from in order to plan and implement interventions that are contextual and individualised (Mutua et al., 2015). Consequently, the researchers' interest in understanding

workplace health and well-being perceptions takes on the philosophical stance of constructionist/ constructivist, which emphasises that truth or meaning is constructed, and individuals construct meanings and concepts in different ways within the same context. Truth and knowledge are subjective and based on individuals' perceptions of health and well-being. No one reality exists regarding health and well-being, and it was within my interest to understand what realities each employer and employee has and what the conceptualisation of their health and well-being within their workplace context. Further explanation about the methodological choice and direction of this study is discussed in chapter four.

Operational definitions and clarification of terms

Health and well-being. The concepts of health and well-being are often discussed either interchangeably or as a connected concept. Even in the scientific environments, the linkage between health and well-being is widespread, where the two terms are mentioned without clarification about their context in relation to the text or discussion at hand (pelters, 2021). However, McLeod and Wright (2016) argue that although health and well-being concepts are used in general discourses in ordinary life, it is necessary to go beyond just what the terms mean to what they represent in people's lives and context. In this study, the terms health and well-being were used throughout, as this was an exploratory study, and there was a need to ensure that employers and employees who are lay persons had the opportunity to address the terms from their perspectives and context. However, in the literature review, health is addressed separately from well-being, and the full spectrum of these terms is interrogated individually before a critical appraisal of health and well-being concepts in the workplace contexts is conducted.

Employee. According to the Kenya OSHA Act 15, an employee is 'a person who works under a contract of employment (GOK, 2007). The Kenya Employment Act 226 describes an

employee as ‘a person employed for wages or salary and includes apprentice and indentured learner’ (GOK, 2007).

Employer. The Kenya Employment Act 226 describes an employer as ‘a person, public body, firm, corporation or company who or which has entered into a contract of service to employ any individual and includes the agent, foreman, manager, or factor of such person, public body, firm, corporation or company’ (GOK, 2007)

Workplace/ Organisation. According to the Kenya OSHA Act 15, ‘workplace includes any land, premises, location, vessel or thing at, in, upon, or near which a worker is, in the course of employment’ (GOK, 2007)

Major contributions of the study.

The study has made various contributions in various arenas related to the promotion of health and well-being in the workplace. Firstly, the study has brought to the fore the discourse regarding the health and well-being of employees in Kenya, where the focus has primarily been on maintaining occupational safety. The study has shed light on the health and well-being status in the workplace, the perceptions of employers and employees within their context, and how they impact health outcomes. The results from this study, therefore, provide new empirical evidence that will be useful in future studies in the workplace health promotion space.

Secondly, the study contributes to the understanding of the possibilities for NCD prevention among populations in the workplace and highlights key implications in this regard for future actions and research. Key implications are discussed for community health nursing practice, as well as workplace health and well-being promotion and research.

Thirdly, the study adds to the body of knowledge regarding workplace health promotion and disease prevention, provides opportunities for the integration of community nursing practice and workplaces for this purpose and provides a conceptual framework for guidance.

The organisation of the thesis

The thesis is organised into nine chapters. In this first chapter, the motivation for this study is discussed in the introduction. The background highlighted the burden of NCDs in Kenya and the role of workplace settings in the prevention of NCDs. Kenya is discussed as the country of focus context and the Kenya nursing practice situated within the health services in Kenya. The chapter also discussed the statement of the problem, the purpose of the research, the research objectives and the significance of the study. Methodological orientation and researcher position are discussed, operational definitions are addressed, and major contributions of the study are discussed.

In chapter two, a literature review is discussed to show an understanding of existing information in relation to the promotion of health and well-being in the workplace to address the research questions for this study against what is already known. The first section of the literature review addresses the key concepts of health and well-being in the context of workplace health and well-being and prevention of disease. In addition, the review explores health promotion literature that addresses workplace health and well-being. The second section discusses the burden and prevention of NCDs globally, in SSA and Kenya, and includes the role of workplace well-being in the prevention of NCDs.

Section three discusses theoretical perspectives of health and well-being promotion in relation to this study and explains the choices made regarding the use of theoretical models and highlights two theoretical models, the health belief model and social-ecological theories, that are closely related to the outcomes of this study.

Chapter three outlines the methodology and methods of this study. The first discusses the methodological considerations of the study, including the philosophical approach underpinning this study, the paradigm, ontology and epistemological stance. The qualitative approach and the research design are discussed. The second part of the chapter presents methods that include practical aspects of identification of the research site, selection of samples, and preparation of data gathering and instruments. Ethical considerations are discussed, including considerations to ensure the rigour and quality of the study, followed by how data was analysed. The study utilised a qualitative descriptive approach, and data was analysed using a thematic framework. The chapter gives an overview of the thematic analysis framework and describes the processes followed to analyse and manage data using the framework.

Chapter four presents the findings of this research, which sought to explore perceptions of health and well-being in the workplace context. The findings are presented according to themes generated from analysis, as discussed in chapter five. The themes generated from the analysis are summarised in a framework Figure 7. The three themes were: 1) Meanings of health and well-being, 2) Health and well-being influences, and 3) Enhanced workplace well-being.

Chapter five discusses the major findings of this study, which were presented in Chapter four. Interpretation of findings was done to show how they align with current literature and how the findings addressed the objectives of this study. The presentation of a workplace health and well-being concept model summarises the discussion.

Chapter six gives an overall summary of the study with reference to the preceding chapters. Key findings of the study are discussed as reflected by the themes generated from this study. The implications of this study are discussed, as well as the contribution of this study.

Recommendations for future workplace health promotion practice, government employers, nursing practice policy and research are presented. Limitations of the study are also discussed in the final part of this chapter.

Chapter seven summarises the study with regard to the motivation for this study, the gaps that were addressed in the study, the key findings of this study and the significant contribution arising from this study. The process of dissemination and personal reflection of my experience through this PHD journey are included, and finally, the impact of the COVID-19 pandemic on workplace health and well-being is highlighted.

Conclusion

The workplace is viewed as an important setting for the promotion of health and well-being. Workers spend most of their daily lives in the workplace, and their lived experiences at work are likely to impact or influence their well-being in various ways. Workplace well-being programmes have been established globally for over forty years. The workplace has become suitable for health promotion, and workers are viewed as a significant population that can be engaged in addressing issues related to health prevention and interventions. However, in Kenya, workplace well-being programmes have yet to gain ground, and there is little known about them where they exist. On the other hand, Kenya is experiencing a rising burden of non-communicable diseases, with rising NCD-related mortality being high.

Workplace well-being is, therefore, an option that has the potential to allow Kenya to initiate well-being programmes where NCD prevention can flourish and make an impact on population health outcomes. However, little research has been done to understand the lived experiences of health and well-being among employers and employees in Kenya. Exploring health and well-being experiences and the perceptions derived from individual interpretation is likely to give direction to how workplace well-being programmes can be developed to

address health within the Kenyan context, as well as inform future workplace well-being research in Kenya. The next chapter will present a review and discussion of the relevant literature.

CHAPTER TWO

LITERATURE REVIEW

Introduction

The purpose of this qualitative study is to further understand employers' and employees' perceptions of health and well-being in the Kenyan workplace context. Although workplace health and well-being programmes have been established for a long time, information about the utilisation of these programmes in Kenya and other SSA countries remains low (Hoosain et al., 2023; Sampson et al., 2013). Furthermore, workplaces are identified as suitable settings where Government agencies and employers can utilise workplace health and well-being initiatives to help employees identify health risks, minimize health risks, and adopt positive behaviour changes for the prevention of chronic diseases. However, research related to workplace health and well-being in the prevention of chronic diseases is not well-known in Kenya, with more studies focusing on social welfare and recreational workplace programs (Ngeno & Mwathe, 2014; Oluoch, 2015; Mokaya & Gitari, 2012).

A review of the literature was undertaken to gain an understanding of existing information in relation to the promotion of health and well-being in the workplace to address the research questions for this study against what is already known. (Frederiksen & Phelps, 2018). Further to this, the literature review was done to identify limitations of existing knowledge and position the study in the context of current research on workplace health and well-being to form the foundation of this study (Aveyard, 2018). This literature review, therefore, provides different viewpoints regarding the concepts of health and well-being across various disciplines. As discussed earlier, interest in this study underlies the current rise in NCD burden in Kenya and the thinking about utilising workplaces to access the population for health promotion and disease prevention. The review, therefore, also discusses NCDS in SSA

and Kenya, as well as the role workplace health and well-being play in the prevention of NCDs in Kenya.

The search strategy is discussed, after which the review is discussed in three sections: concepts of health and well-being, health promotion, and the global burden of NCDs. Given the wide scope of health and well-being and the multidisciplinary nature of the use of related concepts, the first section addresses the key concepts of health and well-being in the context of workplace health and well-being and prevention of disease. In particular, the review addresses debates surrounding the interpretation of these concepts and the influence this had on the direction of the study. In the second section, the review explores health promotion literature that addresses workplace health and well-being. The third section discusses the burden and prevention of NCDs globally, in SSA and Kenya, and includes the role of workplace well-being in the prevention of NCDs. The final section discusses theoretical perspectives of health and well-being promotion in relation to this study and explains the choices made regarding the use of theoretical models. Two theoretical approaches, the Health belief model and Socio-ecological theories that are closely related to the outcomes of this study are discussed.

Search strategy

The literature review for this study followed a structured approach to maintain rigour and transparency. As discussed earlier in chapter one, Tuwai et al. (2015) suggest that workplace well-being in Kenya has challenges and is still in its infancy. Alternatively, according to Mensah (2013), workplace health and well-being have been advancing in other parts of the world, especially in high-income countries, for over 40 years. In this regard, the range of literature used included global literature, especially from high-income countries where research in this area is well established and complements literature from LMICs to inform on the current status of workplace health and well-being, including empirical research and best

practices. This review was also done to help identify areas where this study could inform or add to the body of knowledge from the SSA perspective.

The literature search was done in a structured way to ensure that relevant literature was identified for a more robust evidence-based review (Aveyard, 2018). Relevant literature was sourced from electronic databases, including MEDLINE, Science Direct, PubMed Central, ProQuest, and EBSCO. Electronic databases were searched for peer-reviewed research related to workplace health and well-being, health promotion, burden, and prevention of NCDs. Databases included also offered references to a wide range of disciplines that research various aspects of workplace health and well-being, such as nursing, occupational health, psychology, medicine, and social care. Electronic databases have large subject indexes of peer-reviewed journal articles and allow advanced search for specified topics (Aveyard, 2018). Grey literature was also included from Google Scholar, journal websites, reference lists, government reports, policy papers and conference papers for literature that may not be fully identifiable in databases (Bickley et al., 2022; Mattioli et al., 2012). Journals that mainly publish workplace health promotion-related articles, like Health Promotion International, Global Health Promotion, International Journal of Public Health, and Occupational Health & Well-being, were searched. In this way, using different strategies made the search more comprehensive (Papaioannou et al., 2010).

Keywords relevant to the topic of study were used to ensure a search of a comprehensive range of literature. Search words included Workplace health and well-being; Health promotion; Workplace health promotion; Promotion of health and well-being in the workplace; Employee well-being; Employee workplace health and well-being; Health promotion in the workplace; Worker health and well-being; Workplace health promotion; Prevention of chronic diseases in the workplace; Prevention of non-communicable diseases in the workplace. An advanced search option was used to search for literature to allow multiple

keywords through the use of Boolean operators. And/Or Boolean operators were used to narrow the search scope, including ‘Africa’ AND ‘Kenya’; ‘Sub Saharan Africa’; AND’ Kenya’; AND ‘Non-communicable diseases AND OR ‘Kenya ‘chronic diseases’ AND ‘Burden of chronic diseases and burden of NCDs’ were added to each of the keywords used.

In total, 800 records were identified for the initial review and were from 2010 and beyond. The records were checked for duplicates, which were removed. The articles remaining after this were 350. Screening for relevance was done for titles and abstracts and a further 163 articles that were not relevant were removed.

The remaining 187 articles were considered to determine if they fit within the inclusion an exclusion criteria. Papers published in the English language were included. Papers that discussed research related to perceptions of health and well-being were also included. Papers that dealt with research related to concepts of health and wellbeing were also included in the search. Other papers included were those with studies on workplace health and wellbeing or employee health and wellbeing, health promotion and prevention. Papers that discussed research related to NCD burden, prevention and control were also included.

Papers that were published in a language other than English were excluded. Also excluded were papers that only focused on the cause and effect of diseases rather than perceptions of health and wellbeing in the workplace. This is because the focus of this study was to explore perceptions of health and wellbeing and not necessarily study the cause and effect of specific diseases like diabetes or hypertension among employees. Papers that focused only on specific occupational safety studies were excluded. For example, studies limited to occupational exposures like radiation and its effect on the endocrine system, as this would not address perceptions of health and wellbeing in the workplace adequately. A total of 130 articles were excluded and the final remaining (n=57) articles that met inclusion criteria were used for the

initial literature review (see Figure 2). In addition, as the literature review was updated in the course of the study, more current articles (n=25) were added to ensure any recent work that was relevant to the study had been included. The total number of papers that were utilised for the entire literature review was therefore (n=87).

Most of the articles indicated that much of the research done on workplace health and well-being is from high-income countries and very little from LMICs like Kenya. Research on perceptions of health and wellbeing in SSA is limited, especially in relation to the prevention of NCDs. It was therefore deemed necessary to consider a wider date range from the year 2010 onwards, in the utilisation of literature, to improve depth in the contextualisation of knowledge in this area. Time restriction was therefore re-considered to avoid missing some studies from LMICs which may be pertinent to this study. The older papers also provided information on how health and wellbeing in the workplace have progressed over the years and highlighted the gap that still exists due to the low amount of research done in the SSA region despite workplace health and wellbeing research having flourished for a long time in other regions. Diko (2023), in his commentary about citing in academic discourses, reiterates that older and newer references in the literature review are both relevant in providing valuable contextual information. Similarly, Sigamoney in response to Diko's commentary opines that while utilising the latest research is important, older citations may provide important insights that contribute to a wider understanding of a topic (Diko, 2023).

However, according to Divecha et al., (2023), it's important to utilise the most accurate and relevant articles in identifying papers for utilisation. In this regard, current literature has also been included alongside older papers and was progressively built on with more contemporary literature used in the discussion of the findings in chapter five to show how knowledge in health and wellbeing has developed over time even in the LMICs. In the discussion chapter therefore, findings were discussed in relation to current literature up to 2023, showing how

research on perceptions of health and wellbeing in the workplace has developed over time and during the study.

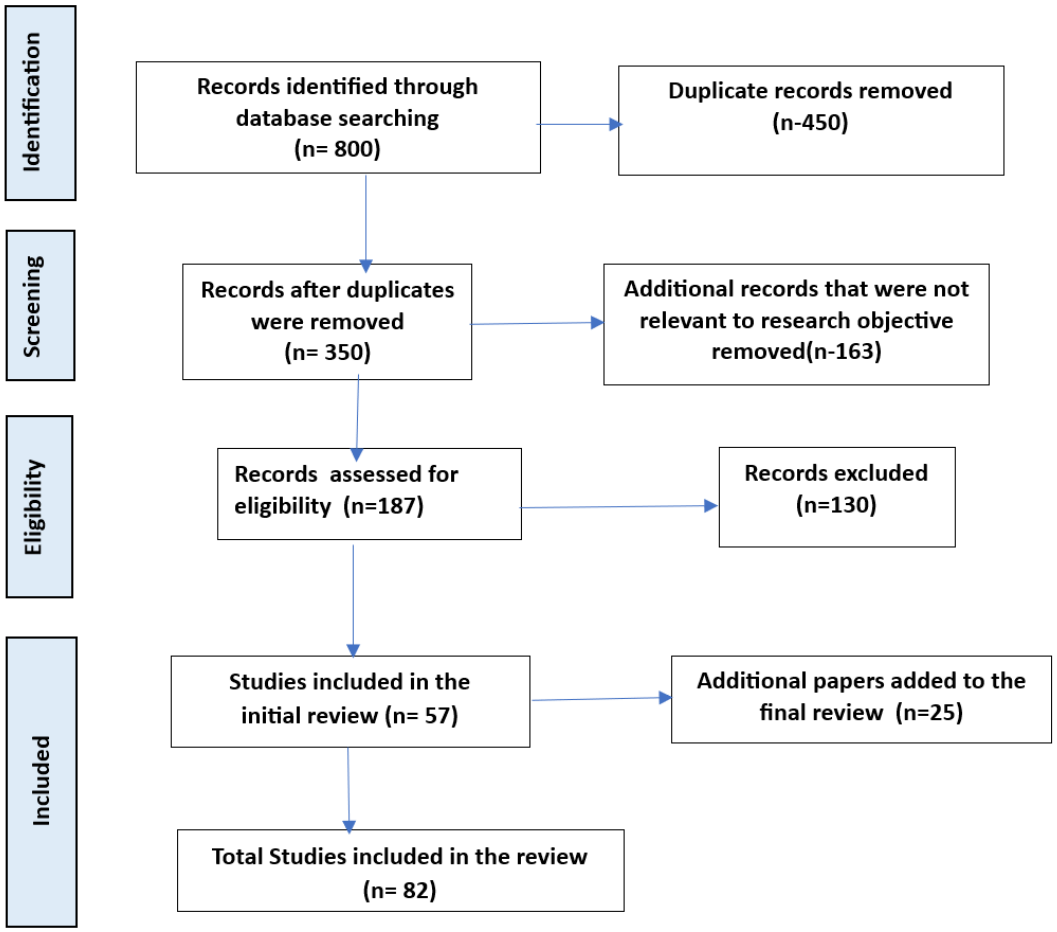

Figure 2 Flow chart of the literature search and selection process

Section one

Concepts of health and well-being

Health and well-being are key concepts in this study. It is, therefore, necessary to present clear explanations and definitions of these concepts from the review of the literature. Concepts establish boundaries between ideas and bring light to interconnections that contribute to holistic understanding (Dooris et al., 2018). This section will discuss the key

concepts to shed light on their use in this study and the role they play in understanding their significance to the study outcomes.

The review of the literature has shown that although the concepts of health and well-being are used interchangeably, it is essential to understand their conceptualisation in the context of health promotion and disease prevention. This is because engaging with participants regarding their perceptions of health and well-being sheds light on lay constructions of concepts of health and well-being concepts and how they influence the workplace context. It was therefore necessary to find out what dialogues exist in the literature and to what extent literature discusses lay persons' views of health and well-being to firm up the research focus. In addition, an overview of health promotion was carried out to understand the philosophy that underpins the promotion of the health and well-being of populations. Research related to workplace wellness programmes in countries where workplace health promotion is established was also reviewed to inform this study and firm up the research design.

The concept of health

Defining health and well-being has frequently been contested, resulting in different meanings attributed to the term (Cross, 2020;). Historically, health was defined from a bio-medical perspective, which gave prominence to the absence of illness or disease (Coffey, 2013; Rodriguez Espinosa, 2020). The World Health Organisation's constitution (1948) defined the term 'health' as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity" (WHO, 2020). The WHO's definition of health is credited with having played a key role in the establishment of global healthcare systems and enabling countries to address disease management in the 20th century. However, with rising chronic health problems, ageing, and increased focus on lifestyle, there is rising criticism that the current definition of health is not adequate to address new perspectives within the health paradigm in the 21st century. As a result, a consensus on an updated definition is yet to be

reached (Van Druten, 2022; Downey & Chang, 2013). In addition, it may be argued that the WHO definition is no longer adequate to address current healthcare challenges, which has implications on practice, policy, and health practice (Leonardi, 2018).

Criticism of the WHO definition arises from the use of the term ‘complete physical, mental well-being’, which leans more towards a medicalisation of society (Hameed, 2019; Naidoo & Wills, 2016). Medicalisation here refers to the process by which various aspects of human life are defined to fit in a medical description, where there is a focus on illness rather than seeking to understand the perceived health of individuals (Hubert et al., 2016; Van Druten, 2022). Similarly, McGrail et al. (2016) argue that people are sicker with the current rise in chronic disease, yet life expectancy has increased, and people feel better - which further compounds the complexity as to what health really is. To assume, therefore, that a complete state of health can exist creates a problem because it negates the possibility of risk factors for any disease, yet most people, assumed to be healthy, are likely to be at risk of some disease (Jambroes et al., 2016). It is also known that treatment of illness does not necessarily result in improved quality of life, and therefore, it is highly improbable that people can experience complete freedom from physical and mental illness in their lifetime (Charlier et al., 2017; Jadad & O’Grady, 2008). The implication that health is a complete state of well-being is not a realistically attainable health benchmark in our current state, where people are living longer and are likely to be having chronic health problems but getting on with their daily activities of life (Leonardi, 2018). Defining health, therefore, must be focused on the person instead of the static focus on disease.

Another viewpoint related to the health concept is salutogenesis. Antonovsky (1996) introduced the term ‘salutogenesis’ which purports that health and illness are a continuum where people at a given time are somewhere along the 'healthy/disease continuum’ (Bauer et al., 2020; Svalastog et al., 2017; Antonovosky,1996). Antonovosky further explains that

modern concepts of health tend to define health negatively, using terms such as the absence of disease or illness to imply optimum health (1996). However, health is better seen as a dynamic process that enables individuals to experience their full potential within a specific environment where they live or interact (Kristjansdottir et al., 2018). Within a salutogenic context, each person is located on a continuum ranging from wellness or optimum health to the other end, where there is an illness that may culminate in death (Drageset et al., 2023; Benz et al., 2014). Antonovsky's proposal that definitions of health should focus on the entire person rather than the disease has influenced nursing practice, which seeks to address the entire spectrum of health as a holistic concept of health. It is then the responsibility of healthcare practitioners to engage in the movement of persons towards health along the health and wellness continuum (Mittelmark & Bauer, 2022).

Health is also defined as an outcome of everyday life rather than the objective of life. McCartney et al. (2019) summarise health definitions as an amalgamation of multiple dimensions that articulate high aspirations of health and well-being. However, tensions within health definitions may arise because not all aspirations of health are achievable and issues such as health inequity temper the definitive aspirations of complete health or absence of disease (Huber et al., 2016; McCartney et al., 2019). Similarly, Shilton et al. (2011) propose an alternative definition that considers equity, rights, and empowerment within enabling environmental and policy systems. Health may, therefore, be defined according to an individual's views about their access to the distribution of opportunities to achieve optimum health (Shilton et al., 2011; Marmot, 2017).

In Africa, health equity is a crucial factor, especially with regard to the attainment of health for all and is central to how health is defined in that context (Braverman, 2022). According to Haimanot (2012), political commitment and appropriate measurement of economic state versus health outcomes are necessary for the achievement of health equity. Stucki et al.

(2020) argue that it is not a matter of whether the definition is right or wrong. The objective approach is to operationalise the definition of health that makes it possible to consistently describe and measure health.

The International Council of Nurses (ICN) views nursing as central to health and well-being and describes the role of nursing as fundamental to the promotion of health, prevention of illness and care of individuals and families in all settings (Shamian, 2014; Bartz, 2010). However, in defining health, nurses continue to align their practice with the WHO (1948) definition of health, which has influenced nursing towards the use of a biomedical view of health despite the holistic scope and nature of the nursing practice (Svalastog et al., 2017; Jormfeldt, 2014). As nursing roles in health evolve, the discipline has broadened the concept of health and viewed it as a multifaceted concept that includes physical, mental, social, and spiritual dimensions within an individual's culture and context (Johansen et al., 2009). What health means to various professions remains a complex phenomenon that is beyond the absence of disease and includes the interpretation of an individual's entire reality within a given context. In nursing, therefore, health is defined in subjective and objective terms within the illness wellness continuum. Consequently, because of this complexity, nursing conceptualises health is sometimes viewed as inconsistent or as a contradiction (Alslman et al., 2017). However, Cross (2020) reiterates that health is a complex phenomenon, hence the many ways in which health is defined, and this has implications for how nurses work with people in a variety of settings.

In the prevailing debate regarding the definition of health, an epistemological perspective may resolve the issue as the approach allows an understanding of how health relates to different situations (Leornadi, 2018). Health is also perceived as continuously created by individuals and groups who interact among themselves in different social contexts. Hence, health embodies many definitions (Huber et al., 2011). There is the opinion that it is not

necessary to substitute the WHO definition of health with another new definition (Huber et al., 2016). It is more useful to accept health as a complex phenomenon, which is best described by many definitions that address specific operational and knowledge purposes in the context within which it is applied (Leonardi, 2018; Alslman, 2017). In addition, health may be conceptualised differently by the same person during their lifetime. For example, health concepts among the elderly are more focused on being able to independently handle activities of daily living (Noughabi et al., 2013), as opposed to a younger person who might perceive health in a eudemonic perspective of happiness and living well.

It may be argued that individuals rather than statistics or mechanisms best define health, so the meaning of health and well-being can be defined by an individual's adaptability to the environment or their activities of daily living (Benz et al., 2014). However, it seems that laypersons have little engagement in this debate as the general public seems to have no platform to add their voice to this discussion (Cross et al., 2017). It would be worthwhile to involve patients and lay members of the public in this dialogue, which currently lies in the hands of the scientific and philosophical communities of practice (Huber et al., 2011). According to Cross (2020), it is necessary to include the lay conception of health because their contribution can clarify critical aspects of health care. A plural approach where many definitions depending on the scope of application are necessary (Leonardi, 2018). There is, therefore, a continuing debate among health experts, philosophers, and other academics regarding the most appropriate way to define health. In the meantime, the field of nursing, like many other health professions, continues to utilise the WHO definition as its standard to this day.

The concept of well-being

Well-being is generally defined as an overarching concept encompassing an individual's state of health, happiness, or prosperity. In addition, the well-being concept is identified as

complex and multidimensional and can be applied to an individual or a community grouping like employees in the workplace (Friedman & Kern, 2014). For example, happiness can be identified as an aspect of mental health where a person's happiness is viewed according to whether they are depressed or having anxiety or elated. Well-being can also be viewed in terms of physical health. When one has an illness or a disability, then their well-being is impacted. Well-being is therefore considered to be a broad and abstract construct that is multidimensional, often used to describe individuals and communities regarding their social, economic, spiritual, mental, and physical aspects, among others (Kirillova et al., 2020; Simons & Baldwin, 2021; Jarden et al., 2021; Jongbloed, 2015).

The discourse about the well-being concept covers various disciplines, including public health, nursing, psychology, business, and religion, among others. However, this has led to a diverse conceptualisation, definitions, and different ways of measuring well-being, all of which pose a significant challenge to the science and practice of health and well-being promotion (Jackson et al., 2022; Duran et al., 2022; McLeod & Wright, 2016). Because well-being is complex, it may require an understanding of individual constructs. However, Dooris et al. (2018) caution that the conceptualisation of well-being at the individual level may only seem to prioritise self-interest at the expense of the collective aspect of the larger community and their contexts. According to McElroy et al. (2021), researchers are increasingly broadening the concept of well-being beyond individualised focus in agreement with the notion that individual, community and place operate in a complex system. Therefore, it is necessary to consider these reciprocal relationships or linkage in understanding well-being concepts.

Similarly, McElroy et al. (2021) did a quantitative study to explore connections among individuals and neighbourhoods using a mental well-being scale, and their findings showed the intricate relationships that exist between individuals and place characteristics in the

context of subjective well-being. According to Kemp et al. (2022), holistic health cannot be fully discussed without considering well-being. Kemp et al. (2022) motivation was driven by their interest in the interconnectedness that exists between individuals and their collective environment, including human and non-human interactions. Accordingly, Mead et al. (2021) argue that there is a need for a broader conceptualisation of well-being and have utilised the GENIAL framework to better understand well-being through engaging people across domains of individual, community and the environment. Ramirez-Duran et al. (2022) express their concern that measuring or evaluating the conceptualisation of well-being is varied across the scientific divide, and this has far-reaching implications as the interests of researchers tend to adopt their own set of values in their approach to well-being like measurement tools and frameworks. The risk is that participants may end up assessing their own perceptions based on elements that may not necessarily represent their context, values and beliefs.

The same concern was raised by Carvajal-Arango et al. (2021), who noted in their study that workplace well-being studies focusing on construction workers have largely focused on indicators that allow measurement of previously established indicators and rarely address well-being from the construction workers' perceptions and value judgement and offer inconclusive results. The team addressed this challenge by adopting a bottom-up approach in a mixed method study that sought to understand the well-being of construction workers' perspectives and concluded that the conventional top-down approach must be complemented by the inclusion of workers' perspectives to ensure completeness and efficiency of well-being outcomes.

The multidimensional and complex nature of the well-being concept, whether examined qualitatively or quantitatively, tends to agree on the importance of addressing well-being in the context within which individuals or communities exist. A study done in Ghana regarding

adolescent construction of well-being found that the meaning of well-being was viewed as the capacity to perform daily functions, including mental strength and vitality (Glozah, 2015). The study concluded that the adolescents' social and environmental interactions contributed to their construction of well-being (Glozah, 2015). Others have defined well-being within the psychological realm and asserted that well-being is a psychological experience promoted by the interconnectedness of self, community and environment and that self-connection and social-contextual factors may predict well-being (Klussmann et al., 2020).

Well-being can be discussed through two constructs -the hedonic pursuit of pleasure and the eudaimonia pursuit of meaning. Hedonic and eudaimonia, therefore, play different roles in the maintenance of optimum well-being (Cheng & Zeng, 2021). Eudaimonia is about developmental well-being, while hedonic relates to immediate outcomes like freedom from pain or personal gratification (Sun et al., 2023; Asano et al., 2020)

The concepts of health and well-being are often discussed either interchangeably or as a connected concept. Even in the scientific environments, the linkage between health and well-being is widespread, where the two terms are mentioned without clarification about their context in relation to the text or discussion at hand (Pelters, 2021). However, McLeod and Wright (2016) argue that although health and well-being concepts are used in general discourses in ordinary life, it is necessary to go beyond just what the terms mean to what they represent in people's lives and context.

Health promotion

Although the WHO definition of health remains unchanged to date, attempts to define health more pragmatically were made in the Alma Ata Declaration of 1978. The WHO definition introduced the 'highest possible state of well-being', which was less absolute than 'a complete state of health.' Consequently, in 1986, the Ottawa Charter for Health Promotion

was passed to start an initiative to achieve health for all (WHO, 1986; Mattioni et al., 2021). The Charter introduced the concept of health promotion, which aims to enable people to live to their fullest health potential and take control of health determinants within their context (Perry, 2018; Kluge et al., 2018). Health promotion achieves this through building health policy, enhancing supportive environments, giving access to health information and opening opportunities for making healthy choices (Rifkin, 2018).

The Ottawa Charter underscores the move beyond a focus on individual health risks to enhancing organisational and environmental promotion of health and well-being for the achievement of optimum health (Thompson et al., 2018). The Ottawa Charter heralded a new perspective of health as a process of everyday life as opposed to a state of complete health (Kehoe et al., 2023; WHO, 2009). Health promotion actions defined by the Charter included building healthy public policy that fosters equity in all sectors to respond to health gaps and to create supportive environments (Kumar, 2018; WHO Africa, 2013; Fry & Zask, 2017). Health promotion is also aimed at empowering communities to take ownership and control of their health and well-being, making them core producers of their health outcomes (Kumar, 2018; Fry, 2017). The other action was to develop skills by providing information, giving health education, and enhancing life skills. The call to action also included re-orienting health services towards health promotion and not just providing curative services (WHO Africa, 2013: Fry & Zask, 2017).

Health promotion is multidisciplinary and multisectoral and includes healthcare professionals, governments, scientists, and community members all working together for the promotion of health and well-being (Phillips, 2019). Health promotion, therefore, proposes to be proactive in fostering equity and empowering communities to participate in their health destiny; creating supportive environments and developing health-promoting skills and capacities; re-orienting health services that go beyond clinical and curative services; and

enhancing advocacy and collaboration through multisectoral and multidisciplinary actions (Lee et al., 2019; Kumar, 2018; McQueen & De Salazar, 2011; Bell et al., 2013).

The 7th Global Conference on Health Promotion was held in Nairobi, Kenya, in 2009 to address challenges in health promotion development, mainstream health promotion and empowering communities as a means to curb the surge of preventable diseases affecting communities in SSA (WHO, 2009; Catford, 2010). However, according to Dixey and Njai (2013), complex issues continue to impede the progress of health promotion in SSA, including disease burden, lack of training capacity, and lack of a well-developed health promotion infrastructure. Although health promotion aims to enable communities to increase control of their health and well-being within their context, enablement and empowerment remain a challenge (Dixey, 2014; Agyepong et al., 2023). There is concern that health promotion practice remains in a public health environment whose focus is directed at medical interventions and curative services, which has impeded the participatory process of various sectors which are key to strengthening community engagement (Asiki et al., 2018; Amuyunzu- Nyamongo et al., 2009). As a result, health promotion activities continue to be centred around curative services and not within community settings like workplaces, schools, and marketplaces (WHO, 2013; Anugwom, 2020).

The Nairobi 'Call for Action' conference was held in Nairobi in 2009, with a focus on urging governments to commit to enhancing health promotion and was therefore intended to renew vigour and increase effort to take health promotion forward in SSA especially to help in upscaling NCDs prevention and control of disease (Samson et al., 2013). The Shanghai conference was held in 2016 with an agenda to enhance health promotion in keeping with the SDGs strategies and national priorities (Nutbeam et al., 2021). The future of health promotion is in contextualising SDGs, including achieving UHC, especially in response to emerging

health challenges like NCDs burden and health emergencies like COVID-19 (WHO 2020; Nutbeam et al., 2021)

A study done by Wanjau et al. (2021) sought to evaluate Kenyan progress made at the national level to re-orient national NCD prevention policy through mainstreaming stakeholder engagement and equitable resource allocation. The qualitative study engaged stakeholders in dialogue to explore their perceptions of current practices and challenges in NCD control and prevention in Kenya. The stakeholders noted that Kenya had well-developed policies that were in keeping with the global health agenda but perceived that policymakers were out of touch with the reality on the ground and seemed to be more influenced by international partners and donors or local politicians and prominent persons in society (WHO, 2014). Health promotion emphasises the importance of empowerment by promoting community ownership, participation, and control within the lived experiences in their context (Bukachi et al., 2014).

According to Wanjau et al. (2021), there were challenges in clear communication and priority setting, which made preventive actions more reactionary than preventative. Stakeholders also perceived existing conflict between government, cultural and religious leaders as these contexts were not addressed inclusively, which negatively impacted the successful process of NCD control (Wanjau et al., 2021). Health promotion is dynamic, and the line between what is political and what is the health system can be difficult to separate. However, Kickbush (2014) notes that the 21st-century dynamism of health promotion governance will require a shift towards political determinants of health.

Some elements of community empowerment exist in Kenya, such as the control and prevention of diabetes. Civil society groups like the Kenya chapter of the International Diabetes Federation (IDF) work with citizens and keep a scorecard to monitor the

implementation of diabetes action plans (IDF, 2015; Shiroya, 2017). Such approaches are useful for the involvement of patients and their communities and can monitor government progress. However, a qualitative study done by Shiroya et al., 2019, to interview key informants on multiple levels of NCD policy implementation identified gaps in non-health sector involvement and monitoring systems. The study highlighted the need for Kenya to strengthen multisector engagement and community empowerment (Shiroya et al., 2019).

A literature review carried out by Newman et al. (2015) sought to explore literature that addressed health equity, determinants of health and policy in the developed world (Newman, 2015). Results showed that gaps remain in addressing inequities and proposed approaches that go beyond behaviour modification to include non-health sectors in enhanced multi-sector participation (Eckermann, 2017).

Thomson et al. (2018) evaluated where we are with health promotion since the Ottawa Charter was established in 1986. They proposed a holistic implementation of health promotion strategies, but over time, health promoters have tended to focus on lifestyle changes of individuals rather than community health actions that sustainably promote health and well-being. The challenge has seen continued changes in government policy and responsible departments. For example, in Kenya, health promotion policy was under local government in the 80s and 90s. However, responsibility was later shifted to the Ministry of Public Health, which was under the medical director and not the chief nurse. This meant that resources for health promotion went to public health officers with very little involvement of nurses. Today, however, with the new PHC policy, nurses have an opportunity to regain their role in the community as key players in the health promotion space. Over the years, it has become necessary to focus on enhancing health-promoting environments rather than individualistic interventions and also to move from acute care-related prevention to primary prevention. As time goes by, the Ottawa Charter will need to evolve to address emerging

issues such as health equity and inequalities and the development of evidence-based health promotion practices (Thompson et al., 2018).

Health promotion settings approach

The setting's approach is built on health promotion principles that support empowerment, participation, equity, and multi-sectoral collaboration to enable people to enhance their control over and improve their health and well-being (Dooris, 2013; Dietscher, 2017). The settings approach, therefore, seeks to operationalise the Ottawa Charter by shifting away from focusing on disease and illness towards contexts where people live, work and play (WHO, 1986; Dietscher, 2017; Frahsa et al., 2020)). In health promotion, settings can be identified within a physical boundary, such as workplaces and schools, where people have a role within a defined organisational structure (Lee et al., 2019). The settings approach is ecological and advocates for a holistic approach to health, including organisational, environmental and personal factors in people's health context (Mittelmark, 2013; Kickbusch, 2014). Settings are therefore used to promote health by reaching people who work in or access services in them as they interact with the wider community (Dietscher, 2017). According to Dooris (2013), the settings approach is holistic and visualises health promotion as a complex interaction of environmental, organisational, and personal factors within the contexts of an individual's interactions with society. Health promotion in this holistic context manages change within the setting in its entirety, not only disease and illness, so that contextual norms, values, and inter-relationships are all considered (Dooris, 2009).

Dooris (2013), who has been foremost in the settings approach discourse, carried out a qualitative study to explore progress made in the settings approach by his peers who were leaders in the movement of the setting. The key informants underscored the basis of settings and the fact that factors beyond health shape health. The 21st-century global landscape is based on open borders, where public health is unbound. The study recognised the need to

ensure the local context is not lost in the global world but noted the importance of understanding the challenges that come with a linked globalised setting, including the influence of technology, which may require a re-definition of settings approach (Dooris et al., 2022; Dooris, 2013). However, the settings elite participants all came from high-income countries, and this may explain the low realisation of the settings approach in SSA, where settings research mostly focuses on specific disease prevention or activity (Kokko & Baybutt, 2023; Parker et al., 2012; Adam et al., 2019), or involve clinical based disease management (Nyamhanga et al., 2014; Svane et al., 2018). As a result, there is the argument that the Ottawa Charter may have been defined with dominant Western ideals that need to be destabilised in a post-colonial world for relevance in a globalised world (Bell et al., 2013).

Similarly, according to Stephen et al. (2010), issues of equity should not just focus on the underprivileged but also on the privileged and how they impact the overall health and well-being of society. However, studies done in LMICs have also shown that inequality issues are global and contextual (Shiroya et al., 2017; Wanjau et al., 2021). The Bangkok Charter for Health Promotion emerged from the 6th Global Conference on Health Promotion, where the disparities existing in the prevention and control of HIV were addressed, and the workplace was identified as a key to health and well-being (WHO, 2009). The conference report concluded that although the principles of the Ottawa Charter remain valid, there is a need to keep abreast with emerging population health influences for it to remain relevant in future (WHO, 2009). Similarly, Liu et al (2024), in their summary of the last ten health promotion conferences reiterated that NCDs are on the rise and there is a need to focus more on holistic, participatory prevention actions.

The role of nurses in health promotion

The Nurses' role in Kenya involves multiple aspects of practice geared towards offering curative, preventive, and promotive health services in a wide range of health environments.

Nurses provide direct patient care in hospitals at all levels of care, from primary to tertiary. They are also involved in leadership, social and health policy in professional organisations, government agencies, and NGOs (Wakaba et al., 2014; Mutisya et al., 2023). In addition, health promotion by nurses emphasises community-based practice, community participation and development. Basic nursing education in Kenya is designed to prepare comprehensive nurses who are oriented to function in acute care settings and the community as generalists, community/public health nurses, and midwives (Appiagyei et al. 2014). As such, they are registered as Kenya Registered Community Health Nurses (KRCHN) by the Nursing Council of Kenya (NCK).

However, despite health promotion being embedded in nursing health promotion practice, it seems that the development of health promotion has not been exploited fully to promote health and well-being in settings outside acute care like workplaces, schools, prisons, etc. (Seboni et al., 2013; Ugochukwu et al., 2013) Given the broad field of health promotion, research in this area is needed from a nursing perspective but is currently inadequate (Uys et al., 2012; Kimani &Gatimu, 2023). Research can provide empirical evidence that can help drive better utilisation of nurses for health promotion in different settings, thereby providing preventive measures. Promotive care for patients, families, and the community beyond the acute care hospital setting.

The involvement of nurses in health promotion has identified the lack of empirical research addressing the role of nursing in health promotion, which impacts how nurses are utilised and has implications for the prevention of chronic diseases (Keleher et al., 2013; Kimani &Gatimu, 2023). For example, a qualitative study undertaken by Lundberg et al. (2017) concluded that an organisational structure that supports nurses in practising health promotion was key to providing holistic care in the prevention of chronic diseases, including cardiovascular-related problems. Similarly, a qualitative study done in Australia explored the

experiences of health promotion nurses working in general practice (Kelehar et al., 2013) and found they did not have a career pathway in the general practice setting. However, according to Philips (2019), nurses can describe their health promotion role in terms of individual health education and disease prevention work, as well as advocacy in relation to health determinants and equity (Phillips, 2019).

Approaches that nurses utilise in promoting the health and well-being of their communities include curative care within a biomedical entity, preventive care, health education and empowerment and advocating for social change (Phillips, 2019). Most nurses work in hospital-based environments, and there may be few opportunities to engage with communities beyond the treatment of disease and health education (Hubley et al., 2013). Consequently, it has been reported that there may be instances where nurses do not seem to understand what health promotion means and equate or limit it to health education only (Whitehead, 2010). However, nurses who work in primary health and interact with communities in their homes, schools, or workplaces can effectively contribute to health promotion practice (Kemppainen, 2012). There is potential for nurses working in primary health to impact health outcomes, and clear policy direction with concerted efforts towards nurse-led health promotion programmes is necessary (Whitehead, 2010).

Some efforts have been made to redirect nursing from a disease-oriented practice to a practice that has a stronger focus on health promotion. This was illustrated in Kemppainen et al. (2012) integrative review to explore the theoretical basis for health promotion in nursing and understand what factors contributed to their capacity to carry out health promotion. Kemppainen et al. (2012) review suggested that the theoretical basis for nursing health promotion stems from a holistic and patient-oriented approach and also from a chronic disease-oriented approach, depending on the context. The review concludes that nurses are the appropriate profession for health promotion but require supportive organisational cultures

to benefit their local populations. There is, therefore, emphasis on the need for more research to determine how nurses can be supported in their health-promoting role within the variety of services they provide (Kemppainen et al., 2012).

Since the Ottawa Charter became the benchmark of health promotion, other conferences have been held with declarations made to add emphasis to health promotion aims and achieve further commitment from WHO member countries to sustain health promotion (WHO Africa, 2013). For instance, during the WHO's sixth global conference on health promotion, the Bangkok Charter for Health Promotion was signed in 2005 with a focus on the workplace. Key commitments made by member countries included placing health promotion within the global development agenda, health promotion becoming a core responsibility of government and making it a requirement for good corporate practice and enabling workplace health promotion programmes to be established in all workplaces (WHO, 2005; Halpin et al., 2010). However, over the years, it has become clear that health disparities still exist across the world, especially in SSA, where low investments in health promotion, poor access and an increasing burden of disease are prevalent (Mauti et al., 2019).

Role of nurses in workplace health promotion

Nurses have comprehensive skills that allow them to address worker-related health and well-being needs in a wide range of workplaces as part of PHC strategy. Their role focuses on the implementation of promotive, preventive strategies in workplaces to ensure the optimum health and well-being of employees (Sivaram, 2023). Nurses have training in occupational and environmental health, which gives them the requisite competencies to give holistic health services in the workplace. Health promotion services nurses provide in workplaces include conducting health assessments and interventions. Nurses also do health screening and risk assessments to identify workers at risk of chronic disease and other health problems that may be directly related to work-related exposures (Sivaram, 2023). Through health promotion

campaigns and wellness programmes, nurses give health education that fosters a culture of health and safety, increasing adherence to the organisation's health and safety practices as well as individual behavioural lifestyle changes (National Institute for Occupational Safety and Health -NIOSH, 2021). Nurses work in a multidisciplinary environment and are therefore able to link workplaces with other healthcare providers in health centres and referral hospitals, work with insurance companies for care management issues and support in follow-up care. The role of nurses in workplace health and well-being, therefore, entails the implementation of holistic care across the health and well-being continuum and is multifaceted and dynamic in this regard (Melariri et al., 2022).

The concept of health-promoting workplaces

The concept of health-promoting workplaces developed from workplace health promotion and has undergone a significant evolution. Earlier on, workplaces focused on addressing single illness or health risk factors for individual employees without considering the determinants of workplace health (Voordt et al., 2023). A health-promoting workplace implements promotion strategies that are in keeping with the Ottawa Charter. Health-promoting workplaces provide holistic care that links the individual, work and environment and has moved from programmes which focus on individual approaches to resolving work-related illness to a more comprehensive, integrative approach (Abumere, 2021; Marsh et al., 2018).

Health is not only affected by occupational-related illnesses, so health-promoting workplaces consider determinants of health and individual health needs, which require access to broader components of health services (Zhu et al., 2020). Outcomes for health-promoting workplaces include improved productivity, reduced absenteeism and reduced healthcare costs, among others. Health and well-being workplace programmes have, therefore, become an integral part of workplace health culture, with both employees and employers making decisions and

taking responsibility for their health (Abumere, 2021; Schulte et al.,2022; Jensen et al., 2019).

Although the concept of health-promoting workplaces is well understood, there remains a challenge in translating the concept to planned action. WHO launched the Global Plan of Action for Workers Health that aimed to provide a basis for designing and implementing workplace health programmes (McLellan 2017; Burton 2010). The WHO framework defines eight domains of health promotion in the workplace and has been followed by many other frameworks since then. However, while these frameworks provide a holistic view of determinants of workplace health, how these are operationalised on the ground has not been very clear (Montalebi et al., 2018; Petrie, 2018). This could be due to diverse interpretations of the concept of health-promoting workplaces. There remains a gap in how workplaces can be translated into sustainable health-promoting workplaces, especially in evaluation criteria and implementation science strategies (Motalebi et al., 2018).

Workplace health and well-being entail all aspects of working life, including quality of work life, environmental and health safety, and how people feel about their work environment (ILO, 2021). According to Karanika et al., (2013), there has been a paradigm shift in the definition of healthy workplaces. Traditionally, the focus of workplaces was on the physical work environment, which aimed at protecting the workforce from risk, minimising exposure hazards and ensuring a safe physical work environment (Dickson-Swift et al., 2014). Today, the definition encompasses health practices, including the promotion of behavioural and lifestyle changes, psychosocial work environment, and linking the workplace to the community in the context of broader determinants of worker health (WHO, 2010).

A healthy promoting workplace is one in which workers and managers collaborate to use a continual improvement process to protect and promote the health, safety and well-being of

workers and the sustainability of the workplace by considering identified needs. (Kirsten, 2024; Trembley et al., 2013). Some of the needs include health and safety concerns in the physical work environment and well-being concerns in the psychosocial work environment, including the organisation of work and workplace culture. It also encompasses personal health resources in the workplace, including strategies for participating in the community to improve the health of workers, their families, and other members of the community.

The workplace health and well-being promotion movement is embedded in the focus on people's lifestyle factors in the context of the WHO health promotion settings approach, which aims at reducing health inequities through programmes aimed at health determinants in different settings like workplaces, hospitals, and schools among others (WHO, 1986; Newman et al., 2015). Workplace health and well-being programmes are currently recognised as an important strategy for promoting health, reducing the burden of chronic diseases, and improving the general well-being of employees (Dickson-Swift et al., 2014). Workplaces, therefore, offer settings where people's individual, organizational and environmental factors affect or impact their health and well-being and can actively engage in shaping their health outcomes positively (Babu et al., 2014; Arena et al., 2014). Utilising the workplace as a priority setting for health promotion presents an opportunity to engage a diverse population group which may be otherwise difficult to reach in other ways in the community (Jessiman-Perreault et al., 2020; Goetzel & Ozminkowski, 2008). As such, outcomes derived from workplace well-being initiatives can have far-reaching impacts on society at large as a ripple effect on other organizations, families, and communities (Hymel et al., 2011).

According to WHO (2010), half of the world's people are economically active and spend one-third of their time in the workplace. The working population is, therefore, critical to a country's social and economic well-being, and this underpins the need for countries to prioritise the health and well-being of their workers. In the wake of the rising number of

communicable diseases, Kenya is experiencing challenges in retaining a healthy workforce, as chronic absenteeism and presenteeism impact productivity in the workplace (Muthoki & Were, 2017; Tumlinson et al., 2019). An overburdened healthcare system is also losing the ability to preserve and restore the capacity of workers (WHO, 2008). Since 2007, there have been concerted efforts by WHO to work with the global community to improve the health of workers. However, challenges remain, and in 2007, the WHO conducted a survey to address gaps that existed in various countries, including Kenya. Evidence from this survey reported that half of the countries surveyed had information and data profiles for occupational health systems but lacked information on communicable diseases among workers. Most countries did not have workplace health databases and did not have research programmes in place to explore workers' health (WHO, 2008). It was suggested that supportive environments should be developed in the vicinity of community functions where they can access health promotion resources and be empowered (Burton, 2010). The workplace is an ideal environment for health promotion programmes, and the WHO has been at the forefront of working with SSA countries to address this gap (WHO, 2013).

While there is a large body of research addressing health promotion and workplace well-being, most of the research output comes from high-income countries, such as America and Europe, but less reported in LMICs, especially SSA countries (Patel et al., 2018; Yassi et al., 2013). Due to the low workplace health and well-being research output in SSA, the literature from other regions that have had the programmes for long enough to make valuable observations regarding the benefits of implementation and outcomes have been used for this literature review (Milner et al., 2015). Other countries that have made progress in workplace health and well-being are in East Asia, such as Singapore, Taiwan, and China (Pham et al., 2020). Literature from Africa is mainly from South Africa and Botswana, which have had more experience in workplace health promotion than the rest of SSA and have reported

research outputs that can be useful in informing future health and well-being initiatives in Kenya. (Patel, et al. 2018; Ledikwe et al., 2017; Kolbe et al., 2012; Ngeno & Mwathe, 2012; Oluoch, 2014; Mokaya et al., 2013; Kyongo, 2013).

Many employers recognise the importance of workplace health and well-being and its role in improving productivity and reducing costs related to the health of their employees (Merrill & Hull, 2013). Workplace well-being programmes are designed to offer services such as health risk assessment, biometric screening, disease and lifestyle management, nutrition, and physical activity enhancement (McLellan, 2017). However, with increasing chronic diseases and ageing employee populations, many employers are seeking to have programmes that identify risk factors, improve worker health and well-being and lower health costs (Newman et al., 2015; Cahalin et al., 2014; Calayeras et al., 2014).

In many countries, workplace well-being activities, which focus on wellness and prevention, have been implemented separately from occupational health and safety programmes, in most cases being managed from separate departments in organisations (Cherniak et al., 2010). This lack of synergistic intervention has often resulted in challenges related to cost and competing priorities (Hymel et al., 2011). The USA is one example of an attempt to integrate workplace well-being with occupational health through the Total Worker Health framework (TWH), which was established in 2011 (Punnett et al., 2020). The TWH programme was introduced by the National Institute for Occupational Safety and Health (NIOSH) as an initiative to establish workplace health programmes in the US which integrate health promotion and chronic disease risk reduction with occupational safety (Tamers et al., 2019; Punnett et al., 2020). The main objective of TWH is to ensure research, practice, policy, and capacity building integrates with the protection of work-related safety, promotion of injury and illness prevention and advance worker well-being.

Several studies have been done to evaluate the effectiveness of TWH in addressing chronic disease and improvement of worker health. Anger et al. (2015) reviewed 17 quantitative studies on TWH to elicit how diverse elements of workplace well-being were integrated and what the outcomes were (Anger et al. 2015). The studies showed that TWH had improved wellness outcomes with a reduction of injuries, behavioural changes reported, and reduced risk factors for chronic diseases (Anger et al., 2015). Over the years, the TWH programme has expanded its research capacity, and evidence has shown that it is more efficient to integrate occupational health with workplace health in addressing health and well-being issues like hazards, exposures, health risks, lifestyle, and mental health comprehensively (Sorensen et al., 2017; Tamers et al., 2019). The USA experience, therefore, highlights the importance of preliminary research before implementing workplace well-being initiatives and subsequent validation through further research. According to Goetzel & Ozminkowski (2008), a strong theoretical evidence base is needed to show the effectiveness of integrated workplace well-being in improving health, lowering costs, and increasing productivity (Barbeau et al., 2012).

The cost implications of workplace well-being programmes have been a subject of interest for a long time, with research claiming that workplace health promotion programmes reduce health costs and others offering contrary results. A concern to employers regarding WHP is whether there are any economic returns and research in this area has shown that health promotion can have positive economic implications as well as other indirect benefits (Fedesco et al., 2018; Mattke et al., 2013; Lee et al., 2010). For example, a critical review done by Baicker, Cutler, and Song (2010) in the United States explored the costs and savings associated with workplace wellness. The highly cited study found that out of 100 peer-reviewed studies, 22 studies reported the impact of wellness programmes on healthcare costs, especially due to reduced absenteeism and healthcare costs (Baicker, Cutler, and Song, 2010).

Similar findings were reported in Dement et al. (2015), a retrospective study based on 7 years of participation in health promotion programmes. Their study supported the assumption that participation in health promotion programmes has a positive impact on reduced healthcare costs and healthcare utilisation. The cost-effectiveness of workplace health promotion programmes was also reported by Goetzel et al. (2010), who investigated a wellness programme where out of 2,431 participants, only 24% completed biometric screenings but noted that 63% of these showed improvements in lowering blood pressure and cholesterol.

Other studies that have shown positive results in cost savings include Caloyeras et al. (2014), who assessed PepsiCo's wellness programme in the US. Caloyeras et al. (2014) reported that wellness programmes resulted in a 29% reduction in hospital admissions related to disease management but showed a small reduction in costs that were related to lifestyle management. The studies suggest that workplace well-being programmes have the potential to reduce costs as a result of reduced health risks and delays in the onset of chronic disease. In addition to reducing medical-related expenditure, worksite programmes also showed improved worker productivity, although according to Cahalin (2012), worker-related productivity is difficult to measure, especially in knowledge-based or service-based environments.

However, there are studies, such as Mattke et al., (2014) and Jones (2019), that claim research related to cost-effectiveness reports modest benefits of workplace well-being and cost-related outcomes. RAND Wellness Programs Cooperation in the US did a study with 600,000 participants across 7 organisations to find out if there were cost savings made from workplace well-being programmes. The study reported that the cost-benefit was low in general but that costs related to well-being programmes targeting people with chronic conditions had better cost savings (Mattke et al., 2014). The RAND report also claimed that there were no savings from lifestyle management programmes that engaged in helping workers lose weight or reduce? stress (Mattke et al., 2014). Another example is a recent

randomised controlled trial published in the USA by Jones et al. (2019) that involved 12000 employees who were invited to participate in a worksite wellness programme. Jones et al. (2019) reported that treatment outcomes for the experimental group were not any different from those of the control group and that data on return investments ruled out previous reports of savings. However, Goetzel (2020) argues that trying to give a definite negative answer regarding whether WHP programmes work is not responsible because, in most cases, the objective of WHP goes beyond cost, and severely scrutinising wellness programmes just to justify their worth to employers is unnecessary. Goetzel asserts that just because there is no return on investment does not mean the wellness programme has failed, but there is a need to look at other objectives like improvement of the workplace psychosocial environment and reduced absenteeism (Goetzel, 2020).

The literature highlights challenges associated with the generalisability of studies related to workplace well-being outcomes because workplaces and populations are diverse (Cooklin et al., 2016; Goetzel et al., 2020). Results would be less polarising in the way they are reported if perhaps research looks at probabilities that can apply to diverse environments for consideration. Well-being programmes are also thought to benefit organisations through enhanced productivity, reduced absenteeism and presenteeism and employee retention, not just in costs (Pieper, 2019). The debate regarding the cost-effectiveness of workplace well-being programmes does not present conclusive information but illustrates the importance of reviewing each programme within its context and with a focus on specific objectives (Astrella, 2017).

It is acknowledged that employers are interested in identifying health issues among their workers and have a vested interest in enhancing their workers' health and well-being (Cahalin et al., 2014). Hence, employer initiatives are directed at improving the health and well-being of workers to mitigate factors that negatively impact productivity and organisational

development. Workplace well-being programmes have been recognised as an important strategy for the reduction of risk factors related to NCDs, like cardiovascular diseases (Arena et al., 2013). For example, in the US, Mattke et al. and RAND Corporation reviewed employee case studies and saw that they had reduced BMI, cholesterol levels and blood pressure (Mattke et al., 2013). In developed economies where workplace health promotion has been implemented extensively, there has been evidence to show a reduction in absenteeism and increased productivity (Pieper, 2019). According to Mattke et al., there are other health benefits to wellness programmes like those related to disease prevention, which can result in early diagnosis and treatment of chronic disease, benefiting employees with improved long-term health trajectory and improvement of quality of life (Mattke et al., 2013)

Another region where workplace health promotion research has been established is the Asia–Pacific region, which has been recognized for the rapid industrialisation taking place in the region. According to Pham et al. (2020), the WHO Asia-Pacific region has been instrumental in facilitating various countries in the region to develop and implement a workplace health strategy, with countries like Singapore, Taiwan and China standing out as examples of best practices. Singapore has a high prevalence of vitamin D deficiency despite being in South Asia, which has sunshine all year round (Nimitphong & Holick, 2013). Little is known about the effect vitamin D deficiency has on workers in Singapore. Hence, Divakar et al. (2019) did a quantitative study to examine the prevalence of vitamin D deficiency and its associated work-related factors among indoor workers. The study found that workers who rotated shifts had more opportunities for sunlight exposure. However, night shift workers had the least exposure to sunlight. It was also noted that most offices have closed windows made with UV-B filtering glass. The study recommended updating workplace well-being policies to include taking breaks outdoors, supplementing Vitamin D-rich diets and regular screening of workers (Divakar et al., 2019).

In Hong Kong, it was noted that cardiovascular health among construction workers is often ignored by the assumption that their work involves physical activity and may have a bearing on their being fit (Daman et al., 2014). To explore the status of construction workers in Hong Kong, a worksite cardiopulmonary health risk assessment was done in 37 worksites (Tin et al., 2016). This was a cross-sectional study to compare construction workers with office workers. However, the results did not ascertain any relationship between construction work and CVD. However, a significant lifestyle profile was found in construction workers, including high smoking prevalence, poor nutrition habits, and high levels of physical activity. The study indicated the need to have separate health promotion initiatives that are related to cardiopulmonary risk assessment data (Tin et al., 2016).

Research has shown that WHP programmes are most effective when health and safety are integrated with the promotion of a healthy lifestyle to give workers opportunities to achieve optimum health. Research has shown that there are benefits, which include early identification of employees with health risks, enhancement of healthy behaviours, reduced absenteeism, increased productivity, and reduced health costs for the organisation. Most of the studies have been done in high-income countries where WHP programmes are well established. Preliminary research before the implementation of WHP programmes and continued research to address outcomes are necessary. The next section looks at the NCD burden and its implications for health promotion in the workplace.

Section two

Global burden of non-communicable diseases

The WHO reported that there is a concerted effort to reduce the global burden of NCDs, which are the leading causes of illness and account for over 70% of deaths world-wide (WHO, 2013; Bigna & Noubiap, 2019). The threat of noncommunicable diseases is a challenge that undermines social and economic development throughout the world. In 2008,

an estimated 68% of deaths out of 57 million deaths that occurred globally were due to NCDs. According to the NCD alliance, by 2016, this had risen to 71%, with 4% of NCDs related deaths accruing among young adults and 38% among adults below 70 years old (Bennet et al., 2018). Efforts are being made to enhance the reduction of the NCD burden through various collaborations, including the UN, NCD countdown 2030, the NCD alliance, and the WHO.

Non-communicable diseases mainly comprise cardiovascular diseases, which account for 48% of NCDs; cancers at 21%; chronic respiratory diseases at 21%; diabetes at 12%; and others at 3.5% (Kane et al., 2017). Risk factors associated with these NCDs include behavioural-related factors like unhealthy diets, smoking, physical inactivity, and alcoholism (Kane et al., 2017). In keeping with SDG 3.4, there is an expected reduction in the probability of NCDs related deaths. According to Martinez et al. (2020), although a one-third reduction is ambitious, studies show that there is some improvement in averting premature NCD-related mortality but reiterates that this trend necessitates actionable public health interventions (Martinez et al., 2020), especially those providing equitable, high-quality preventive and curative care (Bennet et al., 2018). The risk of dying from NCDs is highest in LMICS, especially in SSA, which bears over 80% of the total premature death burden and has a grave impact on the economies of these countries. This section reviewed the literature and discussed the burden of NCDs in SSA and Kenya. It also discussed the management and prevention of NCDs and the role of workplace well-being in the prevention of NCDs.

The burden of NCDs in Sub-Saharan Africa

Health systems in Africa are already under strain from communicable diseases like TB and HIV/AIDS and yet account for 86% of premature deaths related to NCDs (Malekzadeh, 2020; Mensah, 2016). NCDs represent a large proportion of mortality and disability with hypertension, prevalence at 48%, diabetes at 5% and obesity at 20% (Nyirenda, 2016; Mudie

et al., 2019). Projections indicate that the burden is likely to increase from 36 million in 2020 to an increase of 75% by 2030 (Juma et al., 2018). The greatest burden is in cardiovascular diseases, diabetes, cancers, and chronic respiratory illnesses (Yuyun et al., 2020). SSA countries are likely to see the largest increase in NCDs globally, especially among adults who are expected to be exposed to at least one risk factor (Gouda et al., 2019). The burden of NCDs has risen due to the epidemiological transition in SSA, characterised by increased life expectancy, growing incomes, and lower child mortality (Boudreaux, 2020; Malekzadeh, 2020). The growing concern regarding the rising burden in SSA highlights the need for concerted efforts to reduce the burden by at least 25% by 2030, according to the UN Sustainable Development Goals (SDGs) adopted in 2015 (United Nations, 2015).

Consequently, SSA suffers a related economic burden that further hampers efforts to tackle the problem. Between 2000-2013, related cumulative losses were estimated by WHO at 7 trillion USD after assessment of mortality, disability, and DALY losses (WHO, 2013; Global burden of Disease (GBD), 2013; Murray et al., 2013; Bigna, & Noubiap, 2019). As a result, many NCD patients remain untreated or are not adequately managed, increasing morbidities (Kankeu et al., 2013). However, locally derived publications on the cost of NCDs burden in SSA are few, and where they exist are specific to the disease or population group (Settumba, 2015). To manage NCDs according to WHO guidelines, SSA countries must double their expenditure in an already overstretched, low-resourced healthcare system (Siddarthan et al., 2015).

Economic burden of NCDs in Kenya

In Kenya, estimated costs for NCDs show that they reduce household income by 28.64% in an environment where only about 20% have health insurance (Subramanian et al., 2017; Njeri, 2015). Additionally, Kenyans often have to seek care in private hospitals at a higher cost to avoid long waiting lists and lower quality of care in public sector hospitals. However,

research on the quality of NCD care and its impact on cost burden has faced challenges due to wide variation among providers (Basu et al., 2012; Montagu et al., 2011; Berendes et al., 2011; Mwai et al., 2016). For instance, a study by Oyando et al. (2019) examined patient costs for hypertension in public hospitals in Kenya. The study only looked at outpatient costs in two regions where patient data had been well characterised from demographic surveillance done earlier by the team. The study found that the mean annual cost for hypertensive patients was 304 USD, but 42.4% of that amount was for medicines only.

Although most of the studies in Africa are carried out on isolated groups of patient populations and specific NCD problems, the results give a general picture of the economic burden suffered by the public and provide a rationale for concerted efforts focusing on disease prevention through health promotion and education. The burden of NCDs adversely impacts economic development both at the household and at the national level (Wamai et al., 2018). In Kenya, healthcare costs are largely the responsibility of individuals and families as there is no access to health insurance funds, not even for those who contribute to the national hospital insurance fund (Subramanian et al., 2018). This is the same scenario in most SSA countries (Kankeu et al., 2013). However, research undertaken explicating the cost of NCD burden in Africa is few and is mostly specific to one NCD, for example, diabetes, cancer or CVD (Malekzadeh et al., 2020).

Universal health coverage falls under the Sustainable Development Goals targets for the reduction of poverty, health and well-being for all, equitable education, and gender and equality (Okhungu et al., 2019). Health and well-being for all are complex given the relationship between socioeconomic status, equity, and health. Low social economic status is closely associated with chronic ill health (Niessen et al., 2018). The cost of manging NCDs leads to a reduction in household income, early death, and disability - a common scenario in the Kenyan population.

Management and prevention of NCDs in SSA and Kenya

A systematic review done by Kane et al. (2017) sought to find research undertaken on primary chronic diseases that centred on screening and secondary prevention through patient education. Kane identified that patient education was effective in reducing morbidity (Kane et al., 2017). A similar focus on chronic disease influenced a systematic review on NCDs in SSA, which explored cohort studies in fifty SSA countries, including Kenya (Mudie et al. 2019) and reported that most studies focused on hypertension and diabetes within general and clinical populations. However, only one cohort study focused on the occupational environment in terms of the prevention of lifestyle diseases.

A qualitative study done by Asiki et al. (2018) showed that most policies on the management of NCDs do not have a strategy to integrate the management of diseases like hypertension into primary healthcare focus. The primary focus is necessary for appropriate preventive actions to be made in good time before morbidities set in. The STEPWISE survey done in 2015 showed that 8% of adults ages 40-69 had a 30% risk of hypertension, but only 6% of those at risk had received treatment (MOH, 2015). Increased salt intake has been on the rise since 1980, according to the NCDS national prevention strategy, yet initiatives to reduce dietary intake of salt at the primary level are lacking (Oyebode et al., 2016). According to (Mente et al., 2016), high dietary sodium is the leading risk for cardiovascular diseases. However, there is no consensus regarding salt intake in SSA because of known poor data quality (Asiki et al., 2018). Quantifying preventable indicators like salt intake is important for SSA, which is undergoing an epidemiological transition that is likely to result in a change in dietary habits (Oyebode et al., 2016).

The importance of local context is a major factor to consider when dealing with complexities related to the prevention of chronic disease in different settings (Lanham et al., 2013). Current research acknowledges the need to consider the importance of local context,

especially the impact of transferring interventions from one context to another. However, according to Brand et al. (2015), few studies have been conducted to determine the appropriate intervention development. The WHO framework, for instance, assesses the workplace situation as one stage of developing a healthy workplace but does not necessarily give the dynamics of how this can be attained (Burton, 2010; Schouw et al., 2018).

Role of workplace well-being in the prevention of NCDs

The SSA region is currently undergoing an epidemiologic transition. In Kenya, workplaces have traditionally focused on healthcare programmes that offer health insurance but do not necessarily consider primary care and the promotion of a healthy lifestyle within their programmes (Ngeno & Muathe, 2013). In their literature review, Ngeno and Muathe found that although there is evidence to support wellness programmes, little work has been done to research workplace wellness in Kenya. Most of the studies done so far focus on welfare programmes (Kemboi et al., 2013; Mokaya& Gitari, 2013) or workplace-based HIV programmes and not on chronic disease prevention or lifestyle awareness. Most of these HIV prevention programmes focus on disease only and have not adequately addressed other workplace-related factors that impact employee health or other influences on employee health behaviour. Similarly, Mokaya & Gitari (year) explored workplace recreation in hospitality organisations and its impact on stress reduction. Although workplace recreation was found to be useful, there were no comparable studies done in Kenya to support their results (2013).

A range of studies carried out to explore NCD prevention in Kenya discussed either as part of NCD issues in SSA in general or as LMIC overall reports (Wanjau et al., 2019; Adom et al., 2016; Iwelunmor et al., 2016). Studies that have explored NCDS also focus on screening and interventions within acute care settings rather than primary prevention (Achwoka et al., 2019; Wamai et al., 2018; Mwenda et al., 2018; Gouda et al., 2019). For example, a study done in Kenya among workers showed a rising rate of pre-hypertension in the working population

(Mecha et al., 2020). Another study reiterated that although measures to treat hypertension had been stepped up in hospital set-up, greater emphasis needed to be placed on initiating health promotion programmes at workplaces to empower staff towards health-seeking behaviours (Onyango et al., 2017). As scientific advancements for diagnosis and treatment of NCDs increase, there needs to be a collaborative effort to also step-up health promotion activities where behaviour change, policy and legislative expertise are necessary (Coe and Beyer, 2014).

Although most of the studies on NCD prevention do not talk about workplace health promotion in Kenya or SSA, they highlight the burden of NCDs in Africa. This view is reported by Sampson et al., 2013 who claim that the burden of NCDs provides a rationale for health promotion in Africa and further highlights the challenges that remain in implementation, evidence, policy, and practice. These studies show that there is a gap in workplace health and well-being research and practice, especially the role workplaces could play in the reduction of morbidity and mortality associated with NCD prevalence. According to Bosu (2015), complications of NCDs, like cardiovascular diseases, are likely to increase in Africa, and developing workplace health promotion programmes is one of the most cost-effective ways to prevent this increase.

Examples are in Africa, where WHP programmes are well established. Among these, South Africa has more experience in the establishment of WHP research and practice (Milner et al., 2018; Sieberhagen et al., 2011), but studies on health behaviours among the working population are few. South Africa, like other African countries, suffers a double burden of disease, with NCD-related deaths accounting for 34% of mortality. For instance, a workplace well-being study done by Kolbe –Alexander et al. (2012) that evaluated worksite health promotion in relation to improving physical activity behaviour found that although WHP activities were focused on HIV/AIDS prevention, most employers identified cardiovascular

disease as their main concern. Although the number of organizations with health promotion programmes is higher in the South African region, most of the empirical literature emanates from outside the country (Milner et al., Patel et al., 2013). Other countries in Africa where workplace health promotion programmes have taken place include Botswana (Ledikwe et al., 2017) and Namibia (Guariguata, 2015).

Section three

Theoretical perspectives of health and well-being

This section discusses the theoretical perspectives of health and well-being promotion adopted in relation to this study. The section explains the choices made regarding the use of theoretical models and highlights two theoretical approaches, the Health belief model and socioecological theories that are closely related to the objectives of this study.

Theoretical perspectives of health promotion are underpinned by tested constructs that explain or predict health behaviours and are used in the practice of health promotion strategies and health education to transform individuals' and communities' health and well-being (Stevenson, 2023; Rejeski & Fanning, 2019) Health promotion theories are useful for developing objectives for health promotion programmes and research. In addition, they are also utilised in designing programme interventions. Theoretical health promotion models used in research provide constructs for communicating and guiding research methods and designing effective health education programmes. According to Sharma (2021), the theoretical development of health promotion began in the 1950s to enable knowledge-based health promotion and health education interventions as well as develop evidence-based health promotion research for the evaluation of programmes.

However, the use of a theoretical framework in qualitative inquiry has the potential to bias findings or stifle inductive discovery (Corbin & Strauss, 2012; Glaser & Strauss, 1999/2017; Morse, 1992). With these concerns in mind, the goal becomes one of maximizing the utility

of a theoretical framework without distorting the data into an anticipated framework (Corbin & Strauss, 2012). Theoretical frameworks describe concepts and relationships in a given phenomenon, effectively providing a map for qualitative exploration (Miles et al., 2020). Such frameworks may have been built inductively from previous research or based on existing theories or literature (Miles et al., 2020). A theoretical framework is useful in situations where there is an abundance of data to be explored by helping to direct attention to a particular phenomenon of interest (Miles et al., 2020; Cesnaviciene & Gudzinskiene, 2014).

This study is exploratory as there is little information available in the Kenyan context and, therefore, has no abundance of data to direct on theoretical direction. This exploratory study was primarily an inductive approach to explore perceptions of health and well-being in the workplace and helped identify areas of potential for further research opportunities in the workplace health promotion milieu in the Kenyan context. The exploratory approach meant that there were few expectations of what might be found, and conforming to a prescribed theoretical framework to direct or shape the study might have interfered with that trajectory and emergence of phenomena (Bendassolli, 2014; Rendle et al., 2019).

A mediator between theory and data was, therefore, not considered necessary in this study. The study sought to explore perceptions of health and well-being and how they impact workplace health promotion either as individuals or collectively as employers and employees in the workplace. The theoretical framework was therefore not utilised substantively to allow participants to talk freely without their voice being influenced by previous categorisations of the phenomena and, in this case, avoiding theoretical interpretation that might impose the researcher's prior conceptualisations to give opportunity for first-order perspectives within their work world context. According to Odawara (2022), theoretical frameworks and models are best placed for use in designing implementation strategies. They also reiterate that frameworks provide a systematic process, and this has a better chance of increasing

reproducibility. However, theoretical frameworks, even where not utilised to direct conceptualisation of research, can be used to explain phenomena after analysis and interpretation of data, which can lead to theory development. In this study, existing theoretical frameworks were used to explain perceptions of workplace well-being based on the results of the study.

Table 1 Summary of health promotion Behavioural theories

Level	**Theory/model**	**Summary**
Community/Organizational change theories	Socioecological models	SEM guides behaviour change programmes to enhance effective outcomes of public health interventions designed for communities and organisations. The SEM targets individual, social, environments and policy levels to implement holistic health and well-being interventions.
Behavioural theories (Individual and Interpersonal)	Health Belief Model (HBM)	The underlying assumption of HBM is that an individual's perceptions regarding adverse health conditions can impact health behaviour and response to health promotion and prevention interventions. The main constructs of HBM include Perceived susceptibility, perceived severity, perceived benefits and perceived barriers.

Ecological theories of health promotion practice

Bio-ecological theory evolved from the work of Bronfenbrenner's' theory of human development, and it specifies the need to study individuals' development in the context where they spend time and have interactions within the same settings and the mechanisms that drive development(Bone, 2015) The constructs of bio-ecological viewed individuals as being influenced by the environments they live in at the microsystem, mesosystem, exosystem and macrosystem levels. Over the years, Bronfenbrenner's theory has evolved, and researchers have utilised it in various modifications for use in health promotion and prevention research (Salihu et al., 2015).

Current modifications to Bronfenbrenner's model now commonly utilise constructs of intrapersonal characteristics, interpersonal processes, institutional factors, community factors and public policy to show how the dynamic multifaced influences impact health behaviour in society (Salihu et al., 2015). Socioecological models (SEM) assume that multilayered influences are embedded in the environment, and these multilevel levels are interactive and reinforcing. As such, the environmental context may influence the health and well-being of people depending on their beliefs and practices. To establish health and well-being promotion initiatives, the multilayered and multifaceted aspects of communities need to be considered. Socioecological models, therefore, describe the interactive nature of individuals and the contexts that underlie health and well-being perceptions, health behaviours, choices and outcomes. The SEM constructs include intrapersonal, interpersonal, organisational, Community and Policy levels of influence specific to health behaviour.

The contemporary workplace has dramatically changed over the years and is more diverse, complex and multifaceted. This offers new areas of research to understand employers' and employee's interaction with their work world and evolving organisational determinants of health and well-being (Bem et al., 2020; Bone, 2015). The ecological approach favours

holistic conceptions of health and well-being by considering biological, psychosocial, sociocultural and the physical environment in which employers and employees engage daily within their work world context.

The ecological approach considers physical, environmental, social, cultural, and political aspects of workplace health and well-being. This is a move from previous management of workplace health that tended to focus on ill health and has now transitioned to promoting health and wellness to achieve optimum health (Lacasse, 2019). Holistic care is at the core of nursing practice, where interactions with the community are benchmarked on helping individuals, families and the entire community achieve optimum health along the health and well-being continuum through their lifespan (Van-Kasteren et al., 2020)

Work contexts have the potential to thrive as healthy environments- a theory that is rooted in the conceptualisation of health promotion as opposed to management of ill-health and embeds design and assessment of workplace health and wellness initiatives today. In this regard, multicomponent interventions based on ecological models of health and well-being are likely to be effective and sustainable (Bone 2015). The SEM layers employer and employee to show specific facets of the system that influence workplace health and well-being outcomes.

The constructs of SEM that evolved from this study cover the intrapersonal, interpersonal and organisational aspects that came from conversations with employers and employees about their perceptions of health and well-being in the workplace context.

Intrapersonal factors - Highlights perceptions that influence individual health behaviour, such as health beliefs, knowledge, attitudes, and personal health lifestyle.

Inter-personal factors – Influences around groupings within the workplace and the social interactions that shape perceptions of health and well-being. The influence of peers and role

models in sharing perceptions of health and well-being. Peer support, information sharing and its impact on health and well-being behaviour

Organisational factors - Organisational role in enhancing health and well-being through availing resources and time to engage in health and well-being activities. Impact of health and well-being perceptions of employees on organisational productivity, health and wellness costs.

The SEM recognises the dynamic, holistic nature of public health challenges that communities face and is one of the most utilised approaches for impacting health behaviour and health outcomes (Bone, 2015). SEM is designed to address complex issues in health promotion through a comprehensive approach that integrates multiple levels of influence. The levels of approach include intra and interpersonal factors, community and organisational factors and public policies. The premise for SEM is to advance health promotion programmes that not only focus on behavioural change but also the social and environmental context within which behaviours occur or are reinforced (Scott et al., 2013). The strength of SEM is in its capacity to utilise community mediating structures at various levels of society, like workplaces, schools, religious organisations, and neighbourhoods, among others. Policy influences and governance at all levels are also key components in addressing the socioecological perspective of SEM.

SEM is advocated for in the Ottawa Charter for Health Promotion and is based on the concept that behaviour affects and is affected by multiple levels of influence and vice versa, where individual behaviour can influence the social environment as well (Wold & Mittelmark, 2018). Interaction and interdependence of individuals and their social environment are reciprocal aspects of how communities navigate their health and well-being. However, many studies tend to focus on one or two domains, especially individual and organisation.

In health promotion, SEM is used for targeted community groups to understand and identify specific interventions to enhance health and well-being (Golden et al., 2015). Limitations of the model are related to its broad scope. The model creates many aspects that sometimes provide too many possibilities, risking a lack of focus. The broad aspect of the SEM may require careful planning to address the challenges of clearly defining set boundaries of the project, and the resources required are generally more compared to the implementation of other models.

Health Belief Model (HBM)

The HBM was developed to predict health behaviours and is one of the most widely used behaviour change theoretical frameworks which focuses on cognitive determinants of behaviour where individuals make self-directed assessments to decide on health actions for the enhancement of their health and well-being (Alamer, 2024; Noorani et al., 2019). The model is based on the premise that people change their health behaviours from their health perceptions. Perceptions of health and well-being play a role in how employers and employees approach or determine their health behaviours. According to (Haghighi et al., 2019), HBM factors that influence health beliefs include any barriers that might be standing in your way, and exposure to information can prompt one to take action regarding health and well-being. For example, in their study, Haghighi et al. (2019) found that nutritional education based on HBM constructs did not have much effect on intervention groups, as making long-term changes in individual needs requires continuous monitoring. Perceptions regarding the benefit of engaging in health behaviours can also influence one's view regarding change in health behaviour. Perception of how susceptible one is to illness can influence health behaviour. Behaviour change is also influenced by the perception of the consequences of illness and confidence in the capacity to change behaviour.

The HBM, therefore, contains several constructs that predict the way people take actions to control their health and well-being, especially in the prevention of illness (Abhar et al., 2022). Utilising HBM for initiatives in health promotion and health education can be useful in addressing perceived barriers to engaging in a healthy lifestyle, such as the cost of health care, cost of healthy foods, access to healthcare services and can be cues for action and intervention to improve health and well-being (Alamer, 2024).

The health belief model is versatile for various health-related interventions that involve the decision-making process. For example, a study by Ghorbani-Dehbalael et al. (2021) examined the factors that contribute to the adoption of preventive reproductive behaviours in women based on HBM. The study showed that health literacy was a determinant of self-efficacy and perceived susceptibility and had a 52% prediction of preventive behaviour. In another study, Adjei et al. (2024) sought to explore the information-seeking behaviour of a population with a high burden of hepatitis B. They found out that the belief that hepatitis B can cause liver cancer was the most determinant of seeking preventive services. The HBM theoretical framework is, therefore, central to health behaviour-related research and interventional projects within the context of health and well-being.

Components of HBM. The health belief model has components, including perceived severity, perceived benefits, and perceived barriers. Regarding perceived severity, it is assumed that the perceived risk of severity of the illness can influence behaviour change (Chou & Shih, 2022). However, studies have concluded that this is the least effective predictor of behaviour. Perceived susceptibility is where people are likely to change behaviour only if they believe they are at risk. For perceived benefits, belief in the advantages of changing behaviour also increases the effectiveness of behaviour change (Jones et al., 2016). Perceived barriers are seen to make a change of behaviour difficult, including issues

like time, cost, discomfort, and social consequences. Studies have shown perceived barriers to be the most powerful predictor of behaviour change effectiveness.

According to the HBM, external events can prompt the desire to change health behaviour to the extent where the actual change of behaviour is established. Self-efficacy refers to a person's capacity to believe they can change behaviour. A critical factor in behaviour change is faith in one's capacity to change, which is the most effective aspect of behaviour change (Silva et al., 2023).

The design of health promotion programmes aims to encourage and engage people to change theoretical perceptions of health and well-being so that they can overcome barriers and make the steps towards change possible.

The limitation of the Health belief model is that the model focuses on health-related reasons for behaviour change. However, behaviour change and perceptions of health and well-being are complex and multifaceted in general (Jones et al., 2016). For example, behaviour change may be related to peer pressure, health perceptions of others and individual cultural experience, as seen in the findings of this and other studies. In addition, the model does not address other issues that influence health behaviour, such as challenges with time off from work to participate in activities and exercise, or access to healthy foods and their impact on food choices. According to Alamer (2024), the holistic exploration of HBM as a theoretical framework is lacking, especially in its use in interdisciplinary collaborations in behaviour change interventions.

Conclusion

The WHO definition of health has been heavily debated in various circles because health is not viewed as the complete absence of disease by all, and this has seen the discourse about concepts of health and well-being continue to this day. Literature has shown that with rising

trends in global ill-health, where rising chronic health problems, ageing and lifestyle shifts, people may consider themselves to be well even if they have a health problem. Health can also be viewed according to aspirations of well-being, and not all aspirations of complete absence of disease are met equitably in society. Complete well-being is a complex phenomenon that is best defined within contexts of everyday life. The literature review also showed that the definition of health is largely debated by health professionals, academics, and scientists, and the voice of laypersons is rarely included in this debate. The debate regarding definitions of health seems skewed toward health professionals and academics. In addition, research about the health and well-being discourse in SSA and Kenya among lay persons in the workplace context is rare. It is important to understand how ordinary members of society in the workplace perceive health and well-being meanings and how these perceptions influence the workplace context.

Health promotion aims to enable people to take charge of their health and well-being and live to their fullest potential. The concept builds on the principles of the Ottawa Charter, which focuses on equity and empowerment of communities to participate in their health destiny. The Ottawa Charter also focuses on re-orientation for health from a medicalised approach centred on curative strategies to a more holistic approach where a multi-sectoral strategy is preferred to include all stakeholders in matters pertaining to their health. The literature identified gaps that exist in implementing the principles of health promotion, which remain under the influence of the medical model in curative centres instead of engaging with communities in settings like workplaces where people can have control of their health and well-being. Literature also showed that in Kenya, equity and empowerment remain a challenge where policies lack community ownership, fair play and priority setting in their implementation. The literature also discussed the setting's approach, which is ecological and advocates

moving health promotion into an environment where people are empowered beyond disease and illness to realise norms, values, and interrelationships within their context.

The literature review also discussed the progress made in realising empowerment, equity, inclusiveness, and multisectoral collaboration and highlights that though there has been some measure of success, the underprivileged have yet to realise the full benefit of the Ottawa Charter principles.

The review also discussed workplace wellness programmes and their role in the promotion of health and the prevention of disease. The review demonstrated that workplace wellness programmes offer benefits such as early detection of disease and behaviour modification to reduce risks associated with chronic disease. Wellness programmes also offer healthy and safe environments. Literature also showed that organisations benefit from reduced absenteeism, increased productivity, and reduced health costs. Wellness programmes are a suitable health promotion setting where national prevention objectives can be realised. The literature identified gaps in SSA where little research has been done regarding health promotion in the workplace. Most research comes from high-income countries where WHP is well established.

The literature review also discussed the burden of NCDS that continued in SSA and noted the impact on mortality and morbidity in SSA populations. Literature showed gaps in prevention, which is still poor. Literature shows that the integration of NCDS management is still not established in primary health care and continues to be mainly based in hospitals where curative services are only available.

The literature review highlighted the arguments made for and against the WHO definition of health and well-being and the importance of context in how people define health. The need to include all people, including lay persons, was found to be important. This review identified

that there is limited empirical research on workplace well-being in Kenya, and the role of organisations in the control and prevention of disease was not known. However, the literature showed the importance of research before implementing WHP programmes and continued evaluation of progress. The burden of NCDs in Kenya and SSA was discussed, and the need to step up the prevention and control of NCDs was emphasised.

Theoretical perspectives of health and well-being promotion in relation to this study were also discussed. This being an explorative study, the decision was made not to utilise a theoretical framework to allow participants to talk freely without their voices being influenced by previous categorisations of the phenomena. The chapter explains the choices made regarding the use of theoretical models and highlights how two theoretical models, the Health belief model and socioecological theories, are closely related to the outcomes of this study. For example, as discussed in chapter five, findings showed that employers and employees were motivated by their perception that being free from disease was evidence of health and wellbeing status. It was perceived that avoiding chronic diseases like cancer and cardiovascular diseases was necessary to remain healthy. Desire to be free from diseases therefore influenced behaviours like maintaining a healthy diet which was perceived as a means to prevent diseases and engaging in physical activity. In addition, the financial burden related to NCDs was high so employers and employees identified that engaging in healthy behaviours gives a person a better chance of avoiding disease and its related financial burden.

In chapter five, discussion of findings, figure 11 shows how the findings of the study aligned with ecological theories where perceptions of health and wellbeing related to individuals included employers' and employee's health beliefs for example about dietary practices, physical activity and how it influenced their health behaviour. Peer and role model influence on employers and employee health behaviour shows ecological interaction on an interpersonal level. Organisational aspects are discussed regarding employees' perception that

employers need to provide health and wellbeing resources to enhance healthy behaviours like increased participation in activity and exercise or access to healthy meals and health breaks.

The next chapter discusses methodological perspectives that guided this study and the methods used to operationalise this study.

CHAPTER THREE

RESEARCH METHODOLOGY AND METHODS

Introduction

This chapter outlines the methodology and methods of this study. The first part discusses the methodological considerations of the study, including the philosophical approach underpinning this study, as well as the paradigm, ontology, and epistemological stance of this study. The qualitative approach and the research design are discussed. The second part of the chapter presents methods that include practical aspects of identification of the research site, selection of samples, and preparation of data gathering and instruments. Ethical considerations are discussed, including considerations to ensure the rigour and quality of the study. The chapter also gives an overview of the thematic analysis framework and discusses the processes followed to analyse and manage data, showing how codes, sub-themes and themes were generated using the framework.

Purpose of the study

The focus of this study was to gain an understanding of employees' and employers' perceptions regarding health and well-being in the workplace. Literature review showed that little is known about lay perceptions of health and well-being. Literature has also shown gaps in knowledge about the extent of health promotion and disease prevention in workplace settings in Kenya. Health promotion aims at enabling people to experience optimum health by allowing them to take charge of their health and well-being outcomes. Employees spend most of their day in the workplace environment, and therefore, their experiences within that environment are vital to their health and well-being.

Research objectives.

1. To explore employers' and employees' perceptions of health and well-being concepts.

2. To explore how employers' and employees' perceptions of health and well-being impact workers in the organisation.
3. To explore employers' and employees' perceptions of how the organisation can improve health and well-being in the workplace.

Methodology

Philosophical considerations

The research paradigm defines the overarching ideology, beliefs, or assumptions that, in a research context, form the base from which knowledge is produced. Ontology is a philosophical tradition that is concerned with the study of the nature of being and reality. Ontology, in general philosophical terms, is the study of what exists and examines the nature of reality or 'being' and the underlying beliefs about the nature of being, existence or reality (Ryan, 2018; Scotland, 2012). Ontology talks about beliefs about reality and about how we think truth can guide the direction of research. In this regard, our perception of truth can influence how we think and, ultimately, knowledge. Beliefs in ontology can be seen in two ways- that is, realism, where one believes that all truth is objective and that there is only one truth through which knowledge can be generated through generalisation to other situations.

Conversely, others see truth through relativism, which opines that truth is subjective, that multiple realities exist, and that truth does not exist without meaning (Al-Ababneh, 2020). Relativism perceives that truth is shaped by the context one is in and that truth subjectively changes and evolves within a given context. In relativism, truth, being subjective and context-oriented, cannot be generalisable but can be transferable to similar contexts. My ontological stance is that of relativism (Al-Ababneh, 2020). This study was therefore oriented within relativism, and the researcher sought to interact with participants to discover the perception of health and well-being in the workplace context as people can exist within the same context but have different perceptions about aspects of that context.

Relativism, therefore, embraces different forms of subjective reality within the context of interest. Relativists argue that reality is whatever we know at any point in time about current circumstances that people are in within their context. This research derived from a relativist stance requires conversational discourse to understand and interpret individual perceptions as a contribution to new knowledge. However, there is the possibility to question the validity of relativist research, where it is assumed that each account of the participant is considered to be valid because all findings are seen as true realities in their account, which is contrary to objective research (Hammersley, 1992; Gura, 1992).

Epistemology is the study that is concerned with the nature of knowledge. Epistemology describes or is concerned with knowledge within the world and relates to understanding nature or how truth can be known (Al-Ababneh, 2020). Generating knowledge of health and well-being in the workplace involved my being the investigator directly interacting with participants to allow them to voice their understanding, meaning and perceptions to interpret their work world appropriately. Epistemology relies on forms of knowledge that focus on the nature of human knowledge that the researcher can acquire to expand their understanding of phenomena (Al-Ababneh, 2020; Kivunja & Kuyini, 2017). The philosophical stance that influenced this study is constructivist/ constructionist, which highlights that truth or meaning is constructed, and individuals may construct meanings in different ways, even within the same context (Peck & Mummery, 2018).

Constructivism

Constructivism relies on analysing discourse generated from interviews to identify subjective meanings and perspectives within a social context, like in this study, the workplace (Creswell, 2014). Further constructivism posits that worldviews can be within individuals but also be influenced by groups or individuals within established social environments (Bogna et al.,

2020). In this study, I sought to find out perceptions of health and well-being in the workplace, not expecting to find one truth but in anticipation that participants' perceptions may be different, and their interpretations inform their health behaviours in dynamic ways (Scotland, 2012). In other words, truth and knowledge are subjective and based on individuals' perceptions, as well as their interpretation and understanding of them (Ryan, 2018). Modern constructivism posits that the process of knowing is realised through the participation of the observer whose perceptions of feeling about their interactions with their lifeworld can influence action or behaviour. Reality is, therefore, subjective and varies from person to person, and no one reality can exist because individuals make their perceptions and interpretations regarding health and well-being (Parahoo, 2014). It is my view that the world does not exist outside of knowledge; therefore, there are multiple perspectives on reality. Individuals' perceptions, meanings, or views construct their reality, which may influence health and well-being behaviours that are communicated through their interactions with others (Rodriguez & Smith, 2018).

Through constructivism, the researcher sought to understand participants' thoughts or subjective truths regarding perceptions of health and well-being in the workplace. In this case, constructivism allowed participants to drive the direction of the study rather than theory or hypothesis (Wold, 2024; Peterson et al., 2024). Constructivism theory can also be utilised in data analysis to support the interpretation of data or towards the end of the study in the discussion of results. According to Huang et al. Piaget and Vygotsky's learning theory, which posits that knowledge is constructed individually through experience, is in keeping with the constructivist view where truth and knowledge are considered as people's construction created in specific contexts regarding their interaction with their world (Huang, 2021).

In health promotion, empowering individuals to take control of optimising their health and well-being is embedded in constructivism, where knowledge is not acquired for its own sake but for empowering individuals and communities to take actions that liberate their behaviours and health decision-making. Results of constructivist research often then lead to action research or intervention geared towards the promotion of optimum health and well-being (Thompson, 2018).

This study focused on understandings constructed by employers and employees regarding their perceptions of health and well-being within their workplace context. Constructionism, on the other hand, goes further to emphasise that knowledge is not just constructed individually but through social interactions through which knowledge is constructed within contextual discourse (Lincoln et al., 2017). The constructed perceptions, meanings, and views of participants are significant in providing evidence-based knowledge that contributes to or guides how future health and well-being programmes can be contextually designed. Individual perceptions do not exist in isolation but are weaved within and interactive context (Spencer et al., 2014). In this study, therefore, individual constructions of health and well-being were shared with me and through dialogue and collaboration, knowledge about perceptions of health and well-being in the workplace was generated, hence the constructivist aspect of the study.

Social constructionism

Constructionism has evolved within the post-modernist movement to enquire about the underlying structures that lead to human behaviour. Postmodernism opines that individuals perceive the world as having no ultimate truth. Hence, understanding perceptions of individuals' lifeworld helps to reveal what underlies their behaviour (Galbin, 2014). How people perceive their lifeworld differs between individuals, groups and communities and

impacts their behavioural response in different ways (Burr 2015; Burr, 2003). Constructionism helps us to understand the constructed world that people inhabit and how this influences their perception, in this case, of health and well-being in the workplace context. Constructionism also posits that interactions between people and with the world through language and communication, hence the importance of engaging with employers and employees to find out how their interactions within their work world impact their health and well-being and shape their perceptions as individuals and collectively as employees.

Social constructionism also argues that there are many constructions of reality, and this is made possible by the day-to-day interactions people have with those within their environment or social world. This approach to research attempts to bring oneself in line with perceptions of individuals and their lifeworld, which are influenced by social, historical and culturally established views, pinions and perceptions (Burr, 2015; Charmaz, 2014; Hall, 2013). Social constructionism is concerned with subjective interactions in the everyday work world and the perceptions employees and employers make from these interactions. Worldviews and perceptions of employers and employees were, therefore, shaped by the culture and the influences their work world had on these perceptions.

Constructionism in this study enables the researcher to better understand the perceptions of employers and employees regarding health and well-being through the individuals' voices and own construction, which were different according to how they interpreted their daily health and well-being interactions with others and the workplace environment. For example, the behaviours of other employees influence employees to perceive that activity and exercise are critical for health and well-being enhancement. Sharing health information with others in the workplace contributed to how employees' perceptions and health behaviours were influenced. Social mechanisms such as beliefs, cultural values, and education all contribute to

perceptions and constructions of health and well-being, which may have a lasting influence on employers' and employees' health behaviours and outcomes.

Social constructionism interacts with individuals' own creation of reality, and often, the reality is different from other individuals; hence, it is important to know how the constructions of each shape their perception as a contribution to societal norms, beliefs, and values for overall health and well-being in the workplace context. As people interact within a social environment, they construct reality and define their world in different ways, which shape their perceptions about various phenomena. This study, in seeking to understand the perceptions of health and well-being, generated new information about how employers and employees perceive health and well-being concepts in the workplace context.

In addition, participants voiced how their interactions with their work world - like how fellow employees and employers shaped their perceptions. This paradigm underpins holistic nursing, which is concerned not just with people's behaviour but also with the implications of their health and well-being continuum (Jasemi et al., 2017). For nursing practice to be holistic and meaningful, there is a need to accept everyone's reality and meaning-making as constructed from their lifeworld to give individualised and collaborative contextualised healthcare (Jasemi et al., 2017). The researchers' understanding of the participants' perceptions is useful in enabling individuals' voices to play a role in health and well-being matters in the workplace and to take control of and participate in improving their health and well-being (Quick & Hall, 2015).

Qualitative descriptive approach

A qualitative approach has been used to enable an in-depth inquiry to explore the perceptions employers and employees have of health and well-being in the workplace context. This type of approach is suitable for studies which are explorative and seek to understand people's

perceptions or perspectives regarding an identified phenomenon of study, especially in areas where minimal knowledge exists (Doyle et al., 2019; Bradshaw et al., 2017; Creswell 2014). Hence, qualitative approaches can enable the research enquiry to be more attentive to multiple interpretations that individuals may draw from a subjective perspective within a unique context like the workplace (Long et al., 2018; Kim et al., 2017; Creswell, 2014).

Historically, health research in Kenya, like many other parts of the world, tended to mainly use the quantitative approach based on the positivist paradigm (Squires & Dorsen, 2018). A positivist research philosophy defines a worldview centred on the notion of realism - that objects exist independently of the researcher. Positivist scientific propositions are, therefore, founded on data and facts and produce knowledge which is absolute and factual (Scotland, 2012). However, there is a growing interest in qualitative research that views the world as dynamic and not fixed to one reality or measurable phenomenon (Cypress, 2017)

It has been reported that nurses have widely embraced a constructivist world view with qualitative methods dominating nursing research (Quick & Hall, 2015). Arguably, this may have been influenced by nurses interacting with individuals and communities, where they often engage with their client's realities, meanings, and interpretations of their life-worlds, which often determine the direction of care (Squires & Dorsen, 2018). Research should, therefore, support thinking and feelings that underpin individuals' thinking and behaviour as well as the subjective ways in which they engage with their life world (Guerrero-Castañeda, 2018). The qualitative approach, therefore, enables researchers within nursing to gain a deeper understanding of the total individual perspective and thus align with the heart of nursing science that focuses on integrative interactions with the community to promote health and well-being (Jasemi et al., 2017 Simony et al., 2018). Understanding perceptions is key to understanding health and well-being in the workplace through the eyes of employees and employers and their interaction with others in the workplace. The philosophical stance that

underpins this study is, therefore, based on the ontological position that reality is socially constructed, and a subjective epistemology stance is suitable for this study.

A qualitative descriptive research approach was also chosen to understand the meanings that participants attribute to their behaviours and actions and what perceptions they derive from interactions with their work world (Guerrero-Castañeda, 2018). Qualitative descriptive data, therefore, enables the researcher to build a holistic picture that explains complex realities within a given context through shared perceptions, values, and beliefs about the phenomena (Sutton et al., 2016). As discussed earlier in chapter two, it is necessary to explore how this concept of health and well-being has emerged to influence health promotion research, disease prevention, and healthcare provision in general. The debate and diversity among experts regarding definitions of health and well-being do not often include lay persons of the community, yet it is important to give their voice a place in this discourse if meaningful outcomes of WHP are to be realised (Dodge et al., 2012). It is equally important to engage the general community in various settings like the workplace in this discussion to understand what health and well-being in the workplace mean to them, as it can shed light on how these perceptions influence health behaviours in the workplace.

Rational for qualitative descriptive design

Qualitative descriptive designs are often used in diverse healthcare contexts. The rationale for utilising a descriptive design for this study was to use a design that enables the researcher to stay close to participants perceptions of health and well-being without trying to transform the data or their voice but allowing the exploratory nature of the study to evolve in a contextual milieu (Baillie, 2020; Doyle et al. 2020). The exploratory nature of this study requires flexible research processes that allow data to evolve beyond the phenomenon being studied through inductive processes. According to Polit &Beck (2018), exploratory qualitative

descriptive design allows researchers to explore a phenomenon for which limited information exists.

The literature review in this study identified that there is little information about workplace health and well-being in the Kenyan workplace context. This design, therefore, allowed participants to contribute to the development of new knowledge in the context of workplace health and well-being. Qualitative descriptive design is broad-ranging and aims to maximise an understanding of the context of employers' and employees' perceptions of health and wellbeing in Kenya. Hunter et al., 2019 reiterate that in qualitative descriptive design, participants provide an account of the phenomenon, giving it significance from their perspective, and the purpose of the design is, therefore, to describe the phenomenon from the participant's perspective as opposed to from a prescribed prior framework. The detailed description of participants' voices in qualitative descriptive design was, therefore, appropriate for gathering a maximum amount of information within a particular domain, such as the workplace in Kenya. Qualitative descriptive studies have been used widely in various health promotion and prevention studies.

Researchers like Phiri et al. (2019) conducted a qualitative descriptive study to obtain insights into nurses regarding their lifestyle and health behaviours and workplace health promotion programmes in their workplace. Additionally, research done by Pons-Vigues et al. (2017) utilised qualitative descriptive design to understand the concept and relevance of health promotion among healthcare users in a community where information was lacking to inform future design of community health promotion interventions. Accordingly, Nunstedt et al.(2020) found scant information about personal perceptions of nurses who leave the hospital workplace by utilising qualitative descriptive design in their study on nurses working in Swedish hospitals.

According to Rendle et al. (2019), contemporary researchers are using descriptive accuracy of health-related phenomena that are exploratory or have used other approaches. Descriptive studies also feature inductive elements to find out unexpected information and, therefore, must be flexible enough in design to accommodate shifts that occur in empirical findings (Rendle et al., 2019; Hunter et al., 2019). The research, therefore, focused on detailed descriptions of individuals' voices about their perceptions concerning their workplace health and well-being context, hence giving first orders or first-person perspectives.

However, Chafe (2017) and Freshwater (2020) argue that descriptive design in qualitative research is only suitable for studies related to practice improvement and has no impact on theoretical or conceptual understanding. However, qualitative descriptive design does not limit conceptual understanding and often involves interpretive analysis, where the results of research can be further used in theoretical research (Chafe, 2017). According to Freshwater (2020), it is necessary to ensure trustworthiness, transparency, and rigour when using qualitative descriptive design to ensure fidelity to the process and show confidence in the data.

In this study, qualitative descriptive design is aligned with the constructionist philosophical perspective through which employers and employees express their perceptions of health and well-being in the workplace context. Multiple reality exists within various contexts, such as the workplace, in a dynamic, multidimensional context where health and well-being are perceived subjectively. The research in this study sought to allow the exploration of employer-employee perceptions of health and well-being to guide the inductive process rather than seeking to transform the data within a theoretical design. The flexibility that descriptive design allows means that one or more different forms of enquiry can be used to explore different realities and subjective knowledge, views and perceptions, as exhibited in this study. It is argued that this flexibility can impact the credibility of the research. It is, therefore,

imperative that in this study, the researcher is reflexive about all the decisions made throughout the study and maintains robust research rigour by ensuring credibility, confirmability, transferability, and reflexivity quality assurance. Qualitative descriptive designs are being used in nursing and other healthcare research areas and, as reiterated by Doyle et al. (2020), can be particularly relevant to nursing researchers undertaking a primary piece of research that is relevant to transforming practice.

A qualitative descriptive approach was used in this study to gather rich, detailed information from participants' perspectives (Hennink et al., 2020). Qualitative descriptive approaches were found suitable for inquiry that involves seeking an understanding of health and well-being from the employers and employees through their subjective accounts, opinions, attitudes, and beliefs within their work context. According to Doyle (2016) and Kahlke (2014), qualitative descriptive designs offer the novice researcher flexibility to integrate other designs, such as phenomenology or grounded theory, to enrich the study methodology, as strict rules and guidelines do not bind it. For example, this study has integrated reflexivity, which is used in phenomenological and grounded theory studies. Due to the exploratory nature of this research, the approach selected for this research was one that is broad in the endeavour to develop knowledge and understanding in this area of health and well-being in the Kenyan workplace context. The qualitative description approach is designed to develop an understanding of a phenomenon and is subjective in that every participant in this study had their perception, and their perspective was accounted for in the inductive process, so they have their perspective, and each perspective counts.

Other approaches were considered but not chosen for this study for various reasons. Qualitative description studies seek to discover and understand the phenomenon or perspectives of the people involved rather than focusing on culture in ethnography, lived experience in phenomenology or building theory with grounded theory (Bradshaw et al.,

2017). Qualitative description research knowledge is constructed not just by the participants but also by the researcher.

Quantitative research was not used as it measures quality and focuses on establishing validity and replicability. In contrast, qualitative research focuses on interpreting the meaning of data from participants' accounts of their perceptions, views, and experiences with their interactions in their context. Rather than proving or disproving the accounts of participants, the study approach sought to identify perceptions that underlie health and well-being in the workplace among Kenyan employees and employers. As such, no hypothesis was required, and the research questions in this study were designed to facilitate this exploration.

Other research designs were considered to ensure that the most appropriate design was utilised for this study. Grounded theory, for example, was considered but found not suitable for this study. Grounded theory's focus is to derive theory from data systematically gathered from participants' accounts of life experiences and analysed in the research process (Mahajan &Mohajan, 2022; Gehrels, 2013). This study was an exploratory study on perceptions of health and well-being and, not necessarily specific to experiences only and was not intended to derive theory from grounded data

Phenomenology looks at the lived experiences of participants within the world. The aim of phenomenological studies involves the interpretation of meanings made from lived experiences. However, this study aimed at perceptions of health and well-being, and the focus was not on experiences. It was important that from the dialogue with participants, knowledge about health and well-being in the workplace would be generated.

Ethnography is also a qualitative method that requires immersing the researcher in the field through sustained observation and interviews. The collection of data takes a prolonged period and may be in many dimensions, like capturing photography videos to understand and

participate in the cultural perspective of the population being researched (Schembri & Boyle 2013; Shah 2017). However, in this study, ethnography was not indicated as time was limited, and the interview dialogue was with individual participants and did not involve delving into the organisational culture and behaviours but their perceptions about health and well-being.

Case studies are also another area that was considered. Case studies describe actual situations like a specific problem, challenge, or situation that is faced by participants within an identified locality in this case organisation. Although case studies may be exploratory, they are often defined by interest in an individual issue or topic of interest; hence, the object of study is specific and within specific boundaries (Willis, 2014). This study did not aim to narrow the research to an identified specific organisation as this would narrow the research focus. The next section discusses the methods or process followed to operationalise this study.

Methods

This section outlines the steps that were undertaken to conduct the research, including an introduction to the study setting. Practical aspects of the research process were sample selection, data gathering and the data analysis framework that was utilised in the study.

The study setting

The study was done in Nairobi County, Kenya. According to the World Bank, Kenya's population has risen to 55 million from the 48.8 million count of the 2019 census (KNBS, 2019; World bank, 2023). Kenya has an urban population of 30% with Nairobi City County having a population of about 4.5 million (KNBS, 2019; World Bank, 2023). Nairobi County is divided into nine Sub-Counties and serves as the Capital city of Kenya, where the seat of Kenya's Government is situated. Most of the Kenyan population who are in formal

employment, live and work in Nairobi County and account for 25.1% per cent of persons in formal employment (KIPPRA, 2022; KNBS, 2019).

Identification of research sites

The decision regarding which workplaces would be utilised for data collection was guided by location, size and willingness to participate. My work environment is in Nairobi County, which has the largest number of persons in formal employment. Nairobi County also houses a diverse array of businesses; hence, the possibility of reaching a more diverse group of employers and employees was higher. As a resident of Nairobi County, it would be easier for me to move around the research sites and access participants with ease. Organisations were identified in the national business directory, which was identified by the KNBS survey on Micro-Small -Medium -Enterprises in Kenya (KNBS 2016). According to the Kenya Economic Survey 2018, the main economic drivers in urban environments were retail services, accommodation and food services, manufacturing finance, and ICT. These drivers of the economy tend to be the ones with higher and more diverse numbers of employees, hence my interest in identifying study sites from this group. The plan was to identify five (5) organisations, and if they all declined participation, then I would identify another group from the list, so identification was done conveniently. From these groups, I identified five (5) of the most well-known organisations because these were likely to have different locations of work, which increased diversity and gave me a broader account of health and well-being in the Kenyan workplace.

Once the five organisations were identified, I visited to familiarise myself with the workplaces, connect with the leadership and discuss my research project and how it would contribute to enhancing workplace health and well-being in the Kenya context. The visit enabled me to get a general feel of the workplace and the operations that go on there. It was important for me to know the physical layout of the organisation and interact with employees

to understand the workplace culture. I was also able to engage with organisation employers and employees and talk about my study what it meant for the future of workplace health-promoting in Kenya and the potential role the organisations would play in future health and well-being from the outcomes of the study. The employers and employees I engaged with were welcoming, and they looked forward to our interaction during the study. They were enthusiastic about my choosing them as a potential study site. From the first group, two (2) organisations agreed to be research sites and gave letters of permission. The other organisations that did not give permission were public institutions that explained that the process for approval required a six-to-twelve-months approval process period, and this was outside my research timelines; hence, they were left out.

The first organisation that qualified was a commercial cleaning company with branches in three countries in East Africa. The company had over 1500 employees. In Kenya, the company headquarters are in Nairobi County, and they have 500 employees in different parts of the city across five (5) locations. In the western part of Nairobi, where I collected data, they had 100 employees. The cleaning services offered include domestic and commercial cleaning, refuse disposal and fumigation. The second organisation chosen was a manufacturing company that is part of a larger multinational company operating in several countries. In Kenya, the company deals with the production and marketing of industrial cleaning and disinfection products. They have 500 employees across two locations in Nairobi, Kenya.

Table 2 Summary of participating organisations.

Type of organisation	**Number of employees**	**Locations**
Cleaning services- domestic and commercial	500 employees in Nairobi locations	Five locations in Nairobi County
Manufacturing and Marketing	500 employees	Two locations in Nairobi County

Participants sample

This study explored the perceptions of employers' and employees' health and well-being perceptions in the workplace. Employers and employees in the organisations where the study took place comprised the study sample. Convenient non-probability sampling was used to identify the sample. According to Salazar et al. (2015), nonprobability sampling is the most widely used in health promotion research because it provides easy access to pre-existing populations. Convenient non-probability sampling is fast, easy, and inexpensive to utilise (Creswell, 2014). It is considered a subjective way of selecting participants where a representative sample is not critical. This study is qualitative, and the generalisability of the study was not a consideration as in the case of quantitative studies, where it is critical. For qualitative data, non-probability sampling provides detailed descriptions of the sample being studied and allows the researcher to gain more insight (Edgar & Manz, 2017). This being an exploratory qualitative study, a convenient non-probability sample was enough to give initial information about health and well-being in the workplace, which will be useful in further research.

Inclusion and exclusion criteria

The inclusion criteria for employers included those in managerial/supervisory positions or senior management teams of the organisation. According to the Kenya Employment Act No 11 of 2007, "employer" means any person, public body, firm, corporation, or company who or which has entered into a contract of service to employ any individual and includes the agent, foreman, manager or factor of such person, public body, firm, corporation, or company".

Inclusion criteria for employees included employees working in any capacity in the organization that is below senior management, as stipulated by the Kenya Employment Act No 11 of 2007, to include a person employed for wages or a salary and an apprentice and

indentured learner. All employers and employees who had completed a probational period of six months as per the laws of Kenya were included. Also included were all employers and employees who were above 18 years of age - which is the age of consent and employment, and below 60 years - which is the retirement age in Kenya.

Exclusion criteria were implemented for Employers and employees who were new employees in the company and had not completed a six-month or probationary period. This is because they may feel inexperienced in sharing views of health and well-being in the workplace or feel that they are not permanent employees and have a lower sense of belonging, which may impact their contribution.

The sample

The sample for this study comprised seventeen(17) participants, with eight (8) being employers and nine (9) being employees. Creswell (2014) recommends 5-25 participants; hence, the aim was to recruit 20 participants, 10 of whom would be employers and 10 would be employees. After three months of the recruitment exercise, a total of seventeen (17) participants, nine (9) employees, and eight (8) employers had agreed to be interviewed. In the interest of time, a decision was made to interview the 17 participants, as this was still within acceptable numbers to carry out qualitative research.

According to Vasileiou (2018), participants have diverse opinions; hence, it is important to ensure the sample is large enough to uncover most of all perceptions and not too large to end up with repetitive data. In addition, Morse (2015) reiterates the need to consider the scope of inquiry and the nature of participants when making sample decisions. The sample of seventeen (17) employers and employee participants was adequate in uncovering rich information and expressing their perceptions, views, and experiences satisfactorily.

According to Malternud et al. (2016) and Morse (2015), the sample size is determined by the information power or the quality and not the quantity. So, the goal was to achieve optimum

information delivery that meets the purpose of the study. The sample was drawn from employers and employees who could freely express their views and provide meaningful insight into the phenomena (Omona, 2013; Vandermause & Fleming, 2011). Participants belong to the lifeworld of work and were able to give perceptions of health and well-being and how their day-to-day interactions at work influence their health behaviours (Cleary et al., 2014).

Ethical considerations

Ethics approval. The Declaration of Helsinki states that medical research involving human subjects should be approved by an independent ethics committee (Gelling, 2016). Ethics approval was sought for and granted by the University of Salford Research, Enterprise, and Engagement Ethical Approval Panel (Application - HSR1718-067) (See appendix 5). Approval was also sought from a locally approved institution in Kenya where the study was done, so permission from the Aga Khan University Research Ethics Committee (See Appendix 6). A research license from the National Commission for Science Technology and Innovation (NACOSTI) was sought, and they granted permission for me to do the research in Kenya (See Appendix 7)

Consent. Participant consent involves giving information to participants about the study and ensuring they understand and voluntarily give consent to participate (Cargill, 2019). Before signing the consent form (see Appendix 2), participants were provided with a patient information sheet (PIS) that contained all relevant information regarding the study and their role as participants (see Appendix 1). They were informed that participation in this study was voluntary, and all participants were given the right to leave the study without dire consequences. Participants were also allowed to seek clarification of any part of the PIS that they did not understand. According to Klykken (2021), soliciting consent is not just about

meeting ethical requirements but about ensuring the integrity of the study and the participants.

Confidentiality and anonymity. Maintaining confidentiality recognises the value of participants. It is also an ethical way to access not only their information and documents but also their voice. Participants trusted me to protect their voices so that the information they shared was not misrepresented or distorted but a true account of what they shared was upheld. All information shared by the participants in this study will continue to be kept strictly confidential. Any personal information shared outside this project has names and addresses removed, so participants are not recognized. Data documents such as transcripts, have been anonymized and given a code known only to the researcher. Where names have been used, they are pseudonyms and not their real names. Organisation names have also been anonymized to prevent tracing back to the participants in any way.

Data management. Any information stored in electronic format, like audio recordings and transcripts, is password-protected on a computer accessible only to the researcher. Data, including recordings, will be retained for a minimum of three years after the researcher's date of graduation and destroyed after that. If data is used for further studies or secondary analysis, it will be fully anonymized. Data is being protected within the provisions of GDPR (2018).

Data gathering

The qualitative descriptive method allows the researcher to explore understanding of phenomena by utilising semi-structured interviews, which was the choice of data collection for this study (Barret & Twycross, 2018). The purpose of this study was to explore employers' and employees' perception of health and well-being in the workplace and how these may have shaped their interactions with others and influenced their health behaviours. Through qualitative interviewing, one can find out what the participant feels or thinks about their life

world and how this shapes their perception and future decisions about their lifestyle (McIntosh & Morse, 2015). Semi-structured interviews (SSIs) helped to capture the meaning of health and well-being concepts as they were discussed by the participants, allowing them to express themselves freely while still maintaining focus on the objectives of the research (Walker 2020). The semi-structured interviews provided an abundance of data that was used in the analysis to inform the outcomes of this study.

The semi-structured interview instrument

The interview questions were constructed in an open-ended format to allow participants to share information in their own words or voice and allow the conversation to flow with the responses to questions. The semi-structured interview questions (Appendix 3) were designed to allow probing so that I could elicit more details about the participant's perceptions and engage them to continue with the conversation. Interview questions had a logical flow, starting with a broad question, and then the rest of the questions were built up from the conversation as it evolved. According to McIntosh et al. (2015), semi-structured responses are directed to a specific area, and although similar questions are asked, the participants' responses are unique to their perceptions or experiences. The interview questions were based on the objectives of the study and gaps identified in the literature review to explore employer and employee perceptions of health and well-being (Pescud et al., 2015).

The interview questions focused on issues of health and well-being in the workplace and were meaningful for the participants, allowing them to express themselves freely and offer diverse perceptions or perspectives. The research questions for this study were also aligned with the constructivist-constructionist paradigm that allowed me to understand participants' views, perceptions or subjective truths about health and well-being in the workplace, allowing them to drive the direction of the conversation rather than a preconceived theoretical framework. In constructivism, truth and knowledge are considered the participant's

construction of health and well-being within the workplace context (Huang, 2021). The sequence of items that were included in the interview questions included the main question or opening question to set the stage and guide the participant on what to talk about.

The interview guide was designed by me as the researcher and the quality of the instrument was established through internal testing by the research supervisory team. The members of the supervisory team were experts in qualitative research and provided critical information about the interview guide. The quality of the interview guide was also established by me the researcher assuming the role of participant, where a peer researcher interviewed me to gain insight into how it felt to be interviewed and explore the logical progression of questioning.

The main questions of the semi-structured interview schedule

- What does health and well-being mean to you?
- What do you think about how employees influence the health and well-being of workers?
- What do you think about the impact the organisation has on workplace health and well-being?
- What resources would help improve health and well-being in the workplace?

Figure 3 Main questions of the semi-structured interview schedule

Data collection process

I conducted a semi-structured interview with participants to identify, describe, and interpret employer and employee perceptions of health and well-being in the workplace. Acknowledging the existence of prior knowledge and experiences of the phenomena of health and well-being enhanced my desire to enter as much as possible into the participant's world (McIntosh & Morse, 2015).

Semi-structured interviews give flexibility, and the interviewer can probe further as the need arises but remain pertinent to the research objective (Bradshaw et al., 2017; McIntosh &

Morse, 2015). Open-ended questioning was therefore applied to enable probing and clarification of points made during the conversation, as well as to allow unstructured responses to generate open discussion (Mackintosh & Morse, 2015; Vagle, 2020). The participants were able to freely discuss their views and experiences, give their perception of health and well-being as primary information, and voice their concerns regarding workplace health and well-being. In this way, rapport was created, and the flexibility of the semi-structured interview gave space for new information to be given.

Face-to-face interviews were better suited for this study and helped enhance communication because non-verbal cues could be noted and addressed if necessary. This also gave room for me as the interviewer to make changes to interview questions and clarify where necessary, allowing better and more elaborate responses (Lopez & Whitehead, 2013). The goal of the interview was to understand how employers and employees make sense of health and well-being in the workplace and what views and experiences shape their perceptions (Hennink et al., 2020). Face-to-face interviews enabled me, as the researcher, to observe non-verbal communication, changes in voice or body movements, and mannerisms, which provide rich information beyond verbal responses (Oltmann, 2016). This gave me, as the researcher, the ability to see when to pause or continue with the discussion to clarify answers and ask for clarification. Face-to-face interviews were done on the organisation's premises, which gave the researcher a feel for the environment within which the participants' lifeworld exists and shaped their perceptions of health and well-being. For example, on entering one of the organisations, I noticed safety labels, instruction notices, and safety equipment strategically placed in the work areas. Sure enough, this was something participants mentioned as important for their health and safety at work.

Interviews were done during the agreed time with each participant. The semi-structured interview guide was used, and the interview time was an average of 45-60 minutes. Audio

recording was done for all interviews. I allowed the participant to speak freely and listened attentively. This enabled participants to feel they were in control of the discussion and that their views were valued. Each participant requested anonymity, so pseudonyms were used instead of real names to maintain confidentiality. I also encouraged the participant to speak by using non-verbal cues like nodding and smiling to reassure them that I was paying attention and maintained a neutral attitude so that the narrative account of the participant became central to the discussion and not my opinions. This helped to ensure that the participants did not feel the need to change their information to make me agreeable. During the interview, non-verbal communication was noted, and reassurances were given for any noted unease. I also assured each participant that there was no wrong or right information, so they were free to present their views. During the interview, keywords or frequently repeated phrases, self-reflection and my thoughts were noted once the interview was over to avoid distracting participants as they spoke. Probing was employed as necessary, and participants were given time at the end of the interview to add any information or final comments before ending the interview.

The languages used for the interview were English and Kiswahili, which are the official national languages used in Kenya. Participants who wished to use Kiswahili during the interview - were allowed to do so. I am a Kenyan and well versed in the Kiswahili language, so communication during the interview did not require a translator. A professional translator translated the PIS, consent form, and interview guides into Kiswahili. I translated Kiswahili transcripts to English for the portions of the transcript where Kiswahili was spoken to ensure the original meaning was not lost.

Quality and research rigour

This refers to the confidence in the truth of the study findings and emphasises the techniques used to establish that the study utilised procedures indicated for the study approach. The

research design of the study should establish measures to minimise threats to credibility. In the case of this study, measures implemented to ensure credibility included prolonged engagement with the participants and developing rapport with participants and trust to encourage willingness to share information. Debriefing peers to external check on the research process and making clarifications was done with the research team (Nowell et al., 2017)

Confirmability and dependability

Reflexivity was used to augment the researcher's critical appraisal. An audit trail was maintained throughout the research to capture data collection and analysis process. Records of data, recordings, transcripts, and reflexive notes were made to ensure that the findings were auditable by other researchers as they followed processes and decision trials (Nowell et al., 2017; Phillipi & Lauderdale, 2018). A description of participant characteristics and the inclusion of direct quotations from participants were made (Anney, 2014). A critical self-reflection was done to appraise my background, epistemology stance, and behaviours that may have affected the research process (Stahl& King, 2020).

Transferability

Detailed description and sufficient study details of the location of the findings are made possible for future reference, including study location, geographical and social factors, and the research context, which was made clear (Stahl& King, 2020). The study outcomes have addressed opportunities for future policy practice and research to increase capacity for transferability. Providing thick descriptions also as to provide clarity in judging the transferability of the findings was addressed

Reflexivity

Researcher reflexivity is one of the strategies for maintaining the trustworthiness of the study. This strategy helped me assess biases as a researcher and any other experiences that may have impacted the study process. Reflexivity is a deliberate process of the researcher engaging with their conduct of research, biases that may exist through self-reflection (Berger, 2015; Dodgson, 2019). It involves critical attention to researchers' own subjectivity and context influence in the study (Olmos-vega et al., 2023). I will make notes about my thoughts on participants' responses in relation to who I am as a community health nurse and an employee, as well as how this impacted the study (Anderson and Stillman, 2013). Reflexivity helped me to remain self-aware of the power healthcare workers have across communities in Kenya. Creating rapport and ensuring that the relationship with the participant was that of a researcher and participant and not necessarily the “all-knowing nurse” was established (Teh & Lek, 2018). It was important for me to make it clear to the participant that my role in the interview was that of a researcher and not that of a nurse. This is because within the communities I work with, healthcare workers are seen as superior persons who are knowledgeable, and therefore, one has to be careful how they interact with them.

Conversely, I, too, needed to be more self-aware regarding my role as a nurse and my experience in a clinical setting interviewing and taking on the role of an interviewer in a research setting. In this way, the interview discourse was focused and open. According to Berger (2015) and Carter (2014), the researcher needs to be aware of themselves considering the world they study. Reflexivity involves self-awareness about who we are in the research process and acknowledging the limitations of the research. Reflexivity can have an impact on the way the study is contextualised and how data is collected and analysed in the construction of new knowledge (Engward & Davis, 2015).

When working in the community, I often wear a nurses' uniform or a lab coat so that I am easily identifiable as a healthcare worker in the field. However, this form of dressing was not appropriate for conducting research interviews, so I did not go to the interview in uniform. Non-uniform care was piloted at a Hong Kong hospital, where they found that non-uniform interactions with clients promoted a warm and caring perception and improved client-nurse relationships (Chu et al., 2020). It was important for me to maintain the separation of clinical setting interviews from field research interviewing so that any participants would not feel like they are in a hospital setting, which may impact the way they respond to questions. Popovenuic (2014) mentions the importance of researchers moving beyond their specialist role to being mindful researchers through reflexive practice. Reflexivity can be on a personal, epistemological, or ethical level to make the process of research and decision-making as transparent as possible (Engward & Davis, 2015)

Data analysis

Thematic analysis

Thematic analysis was utilised for this study, which is a method for analysing, organising, describing, and reporting themes in qualitative studies (Braun & Clarke, 2014). Thematic analysis is widely used in qualitative studies for a wide range of research objectives and epistemologies. Thematic analysis was therefore found to be a suitable method to understand perspectives of health and well-being in the workplace and generate new insights that contribute to knowledge in this area (Nowell et al., 2017)

Inductive analysis enabled me to understand the dynamics within the workplace health and well-being environment and construct various possibilities that inform recommendations for the future design of health and well-being initiatives in the Kenyan context (Braun and Clarke, 2021). In health promotion, the voice of the community is key to a bottom-up approach to ensure that the health and well-being initiative starts with engaging people to

lead change within their context and understanding. Using thematic analysis requires the researcher to remain as close to the data as possible throughout the entire process. The analysis process used in this study was to code data and generate themes from the transcribed interviews and not attempt to fit the data into a pre-existing framework or coding frame. This was done to avoid influencing participants' dialogue to fit my analytic preconceptions. In this way, the descriptive stage of thematic analysis for this study was data-driven. Inductive analysis, therefore, utilises the participants' conversation to make meanings from their perceptions. The analysis involved an inductive exploration of data for recurring themes and patterns to gain a deeper understanding of employers' and employees' perspectives, views, thoughts about health and well-being and the influences that shaped their perceptions. The analytic process then progressed to interpretive, where theoretical, epistemological analysis is done to summarise the significance of themes and their broader meaning in light of literature and previous research.

Moreover, the analytic process also involves a reflexive engagement with the data that facilitates an interpretive approach to identifying patterns or themes from the data (Braun & Clarke, 2012). According to Byrne (2022), the thematic analysis also does not prescribe a specific theoretical stance and is suitable for the utilisation of a wide range of ontological and epistemological considerations. Thematic analysis is, therefore, a reflection of the researcher’s analytical interpretation of data through thoughtful engagement or emersion in the data, and theoretical assumptions of the analysis and skills of the researcher. In thematic analysis, there is no one-size-fits-all, and every researcher's engagement with the data elicits unique interpretations of the data; hence, the analysis may not be reproducible across multiple researchers (Braun & Clarke, 2023). According to Vaismoraldi (2013), qualitative description strength lies not just in the knowledge from the data but may result in the establishment of meaning and solid findings. The process of thematic analysis in this study was flexible and

evolved throughout the exercise and as I familiarised myself with the data new interpretations and patterns of meanings were realised.

Steps of thematic analysis

The approach to analysing data in this study was a six-phase process that was adapted from the thematic analysis framework by (Braun & Clarke, 2006). Thematic analysis involves identifying common patterns of meaning in a range of texts. Although thematic analysis followed six phases, the process involved moving back and forth through the phases and not necessarily completing one phase and then moving to another. According to Braun and Clarke (2006), thematic analysis is not a linear process but a recursive process enabling researchers to move back and forth throughout the phases over prolonged engagement with the data. Throughout the analytic process, I continued being reflexive to understand how personal biases may influence how I was interacting with the data and any related assumptions I may have had regarding the content of the data. According to Campbell et al. (2020), self-examination should be practised by situating self throughout the research process.

Table 3 Phases of thematic analysis

Phase	Description of the process	Activities
Familiarisation with the data	Reading and re-reading transcribed data to gain an in-depth understanding of the entire content	Transcribing audio data. Reading and re-reading transcribed data. Taking notes -initial ideas
Generating initial codes	Coding interesting features of the data systematically across the entire data set, collating data relevant to each code.	Organise data into meaningful units. Labelling meaningful units into codes
Generating initial themes	Collating codes into potential themes and gathering all data relevant to each potential theme	Back-and-forth reviewing of codes to identify relationships Identifying potential new themes. Writing themes and their properties
Reviewing themes	Checking if the themes work in relation to the coded extracts and the entire	Checking congruency between codes and initial themes Integrating similar themes to one theme for coherency Refine potential new codes and initial themes.
Defining and naming themes	Ongoing analysis to refine the specifics of each theme and the overall story the analysis tells, generating clear definitions and names of each theme	Review identified themes to ensure congruency with overall study and unique contribution to the study Engage with the themes to identify the essence of the theme and select meaningful extracts.
Producing the report	The final analysis of selected extracts – relating to research objectives literature to produce a scholarly report of the analysis	Situate the themes of the overall report, including objectives, literature review, findings and discussion.

Adapted from Braun & Clarke (2006)

Phase one: Familiarising self with the data

This phase involves immersing oneself in the data to understand the depth of the conversations within the entire data. I read and re-read several times to familiarise myself

with the data, a process that started with transcription of all Interview audios. This involved ensuring the audio-recorded conversations were transcribed verbatim to retain information in its original nature. This exercise gave me a thorough understanding of the data and formed the initial part of the analysis.

Through active listening, I then went through the audio again to ensure the accuracy of the transcriptions, also noting changes in the tone, breaks, and pauses throughout the conversation. During the initial active listening, I did not take any notes, but it took time to get a feel for the conversation and a general idea of how the conversation progressed. I noted things that I could remember, like mannerisms and gestures, which I may have missed documenting during the interview stage.

I then engaged with the data through reading and re-reading to become familiar with the entire body of data while making notes of key information and early impressions of the conversation. Immersion with data allowed me to familiarise myself with the depth and breadth of the data by actively searching for meaning and patterns within the data. The notes I made included interesting passages, trends in the conversation patterns and any unusual pieces of conversation that seemed out of place from the main trajectory of the interaction. Some of the notes I made in this stage continued to inform the process of interpretation and making of themes for the study. Examples of comments I made in the notes are as follows:

> *"Participants seem to emphasise a lot about their own context and their appreciation of aspects of health and well-being related to cultural knowledge and perspective."*
>
> *"Health and well-being seem to be perceived as one word denoting health. Though a response, for instance, uses the term health, the person includes aspects of well-being in the discussion."*

"I am surprised by the overall enthusiasm and genuine appreciation of health and well-being as central to employee's daily life. Could this be a bias on my part? What were my expectations?"

"So, I am wondering - is the fear of having the diseases mentioned influencing the desire to live a healthy lifestyle? "

Phase two: Generating initial codes.

According to Byrne (2021) and Campbell et al. (2020), coding is undertaken to elicit short descriptive or interpretive labels, which make meaningful groups of data, which become pieces of information that are useful or relevant to the research objectives. Through this process, I wanted to find out if the responses generated were answering the research objectives, which was to explore the perception of employer and employee perception of health and well-being in the workplace context. As I went through the data transcripts, I systematically made notes of aspects or items in the data that might become codes and those that may develop into themes further on in the process. The codes generated were brief enough to offer sufficient detail for further analysis, either as stand-alone items or in common with other data items. As I read and re-read each transcript, I was able to begin identifying phrases, paragraphs or sentences that were unique and meaningful regarding health and well-being in the workplace. These passages of interest were given descriptors, giving attention to each participant's voice. Open coding was done for the whole data set, and codes were modified as I progressed through the process.

Table 4 Excerpts showing initial coding

Excerpts from transcripts	**Initial coding**
P: Sometimes it is like it is too much on time: **1)** Time is a real issue because mostly when you are a working person, you have to leave early to get to work early **2)** when you leave work, you get home late, and it is probably if you are a family person then you cannot start leaving your family to go and do gym, you do not have that time. P: Like in our workplace, it is something that we keep like, say, discussing, **3)**'dropping the ball' along the way. There **4)**was a time we engaged a sports club nearby, and the company had even gone ahead and negotiated so that **5)**we get subsidized rates and the members actually joined the club, and we did that for like a year, but still because I think of **6)**this issue I was talking about time, some **7)** members will never go there, and you are paying so it will appear that it is not giving the results that were expected. So, of course, we withdrew from that. Still, in terms of colleagues, we would join an **8)** WhatsApp group and motivate each other, maybe on Saturday, to go and run. People go once in a while, but not all of them. But I think it is something that is clear to people in the organization. P: **9)**If the resources were availed nearer to you then if you know you are leaving work at five **10)**you can decide to do thirty minutes before you go home because you know there is even if there is traffic or jam whatever in Nairobi or that at least you can even do that and go home but if you say you leave here go home first and then you... P: Diet okay. I think it is more of what we are used to eating versus what is happening with the current trend because **11)**we grew up eating without caring about what we are eating, so **12)**	**1)** Time and work-life balance impacting activity and exercise **2)** Family priorities competing with lifestyle maintenance **3)** Consistency in maintaining healthy behaviour **4)**Challenges with time for activity and exercise. **5)** employee benefits **7)** Low return on investment for the organisation **8)** Peer challenge and motivation **9)** Organisational support – resources **10)**Time management in enhancing healthy behaviours **11)**Traditional versus modern dietary lifestyles

change that mindset to be told now do not eat wheat, do not eat whatever and that is what your taste buds are used to. **13)** It is very hard to stop; then again, sometimes, when you are in the workplace, it is difficult sometimes to get what you want, yeah.	**12)**Changing dietary mindsets or peer pressure? **13)**Access to healthy food choices is lacking

The codes for each transcript were noted on the side margin of the transcript. Texts that were assigned codes were highlighted for easy identification. Each code was matched to the relevant text using numbers written in red. The codes gave my initial interpretation and were further redefined as the analysis progressed through repeated engagement with the data, which allowed more iterations to generate codes that would move to the development of themes. Some codes were set aside but later used as I went back and forth in each phase. As relevant texts were assigned codes, they were transferred to an Excel sheet where further iteration of the text was done. From the first round of coding, there was already evidence of codes that had potential for further analysis, like the codes related to activity and exercise, which later became a subtheme and contributed to the theme of the meaning of health and well-being.

The process of generating codes required inductive reasoning and interpretation of what each unit meant. There was no limit to how many codes may be generated from a data item, and I also found that a data text could have many interpretations. For example, in the data item (7), paying for employees to attend the gym and having low attendance could have been interpreted as poor planning and communication on the part of the organisation or lack of interest on the part of employees. However, considering the context in which the text was set, I finally opted for a low return on investment because I had more information about the context from conversations with employers.

Phase three: Generating initial themes

A review of codes was done to identify relationships and potential themes for the generated codes. Various codes were grouped into piles to develop patterns and generate themes (Byrne, 2021). Analysis of the codes was done to re-focus themes into broader themes. The analysis involved the interpretation of data beyond the meaning units that were generated as codes in the previous phase. This was an active exercise rather than a passive one. I thought through how codes related to a potential theme and grouped themes into theme piles representing a subtheme or a main theme, showing the connections that represented the relationships as they were generated. Some of the codes overlapped or had similar characteristics, like the issue of time, where participants wanted to be given time to attend an activity or exercise, but employers talked about the impact of the cost of time and productivity impacted by absenteeism.

From this phase of analysis, I started organising coded data and combining those that had shared meaning as they related to themes, then grouped them into sub-themes to show different levels of generating themes. I found the best way to identify various coded data and how they related to the defining characteristics of various themes that I generated was to organise them in a mind map so I could easily visualise the process as I progressed (figure 4). The themes are shown in pink, with lines showing relationships. The subthemes were represented in grey, and connections and relationships with themes and coded data are shown in green lines. Some of the coded items in green were not combined to become subthemes, so they were left for further analysis in subsequent phases as potential themes or subthemes.

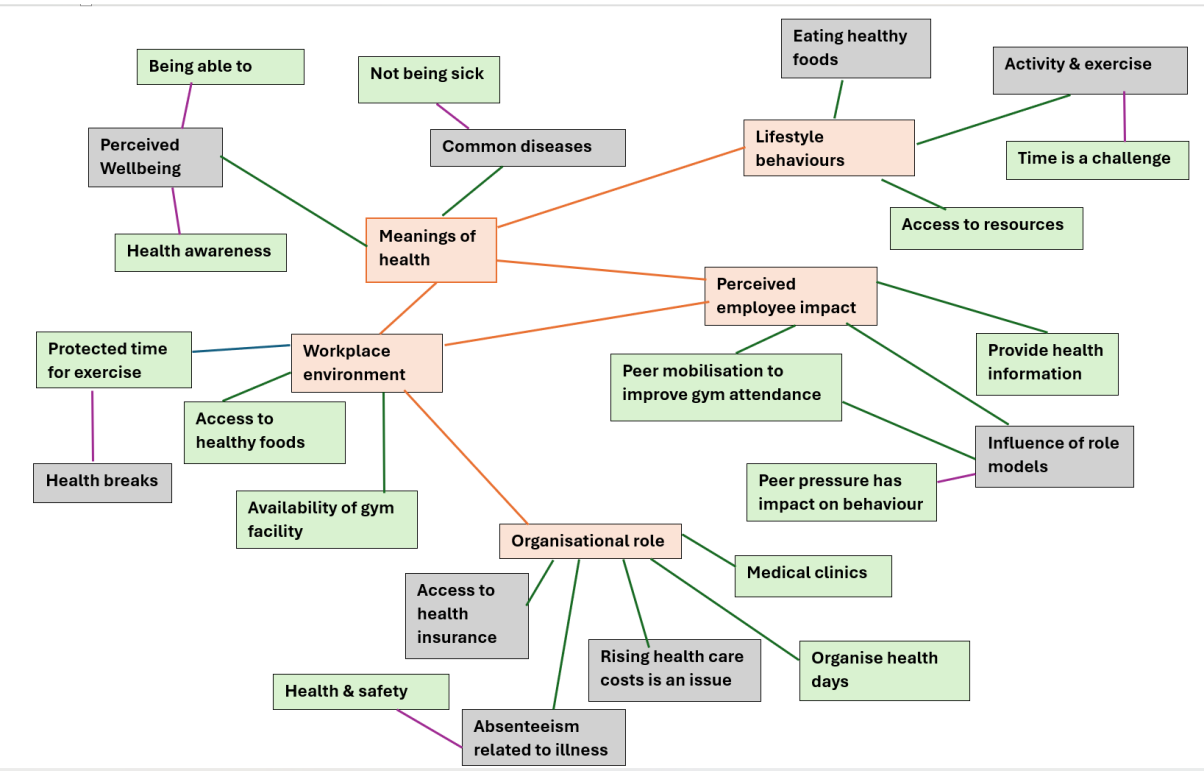

Figure 4 Generation of subthemes and initial themes

Phase four: Review themes.

This involved a review of the entire dataset and codes to ensure themes represent the data appropriately and coherently address the research objectives. This started by first reviewing the coded data extracts to check for coherent patterns. I reviewed coded data to check if it was congruent with themes and sub-themes and was making a coherent, logical interpretation. I also checked to see if themes and sub-themes contributed to the overall account of the analysis. Themes and sub-themes were also reviewed to see if they provided an appropriate interpretation of the data and the objectives of this study. Themes were then organised into patterns as relationships were identified, and patterns that did not fit in any group were set aside for further review as the themes were generated. Clustered codes that had been left out were then reviewed and re-coded, and new clusters were formed to identify potential new themes. This back-and-forth process continued until themes were congruent

and fitted together to give an overall understanding of the perception of health and well-being in the workplace. The finalised thematic review map (figure 5) saw some themes and subthemes combined and some coded data reconstructed to become sub-themes, with final themes in this phase reduced to four.

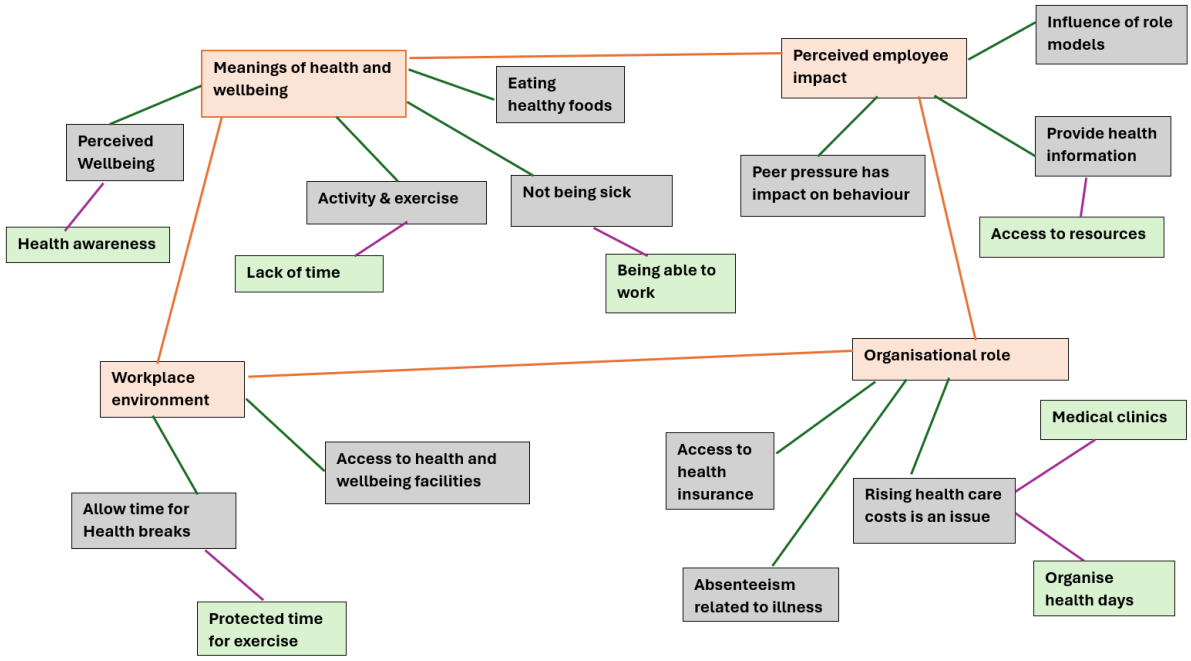

Figure 5 Review of generated themes

Phase five: Defining and naming themes

Further analysis was done to define and name each theme according to its uniqueness and contribution to the study. Sub-themes were further analysed to identify how they engage with the main themes to give the essence of what each theme is about—this involved the selection of meaningful extracts through deeper analysis of the underlying data items. The extracts identified were those that would be utilised in the next phase of writing the analysis report. Multiple data were extracted from the entire pool of data that had been set up in Excel format to identify data items that informed the themes and sub-themes, conveying meanings and

demonstrating cohesive relationships to the overall objectives. Three main themes formed the final mapping of this phase, which shows the themes and subthemes that formed the thematic framework for the findings of this study. (See Figure 6)

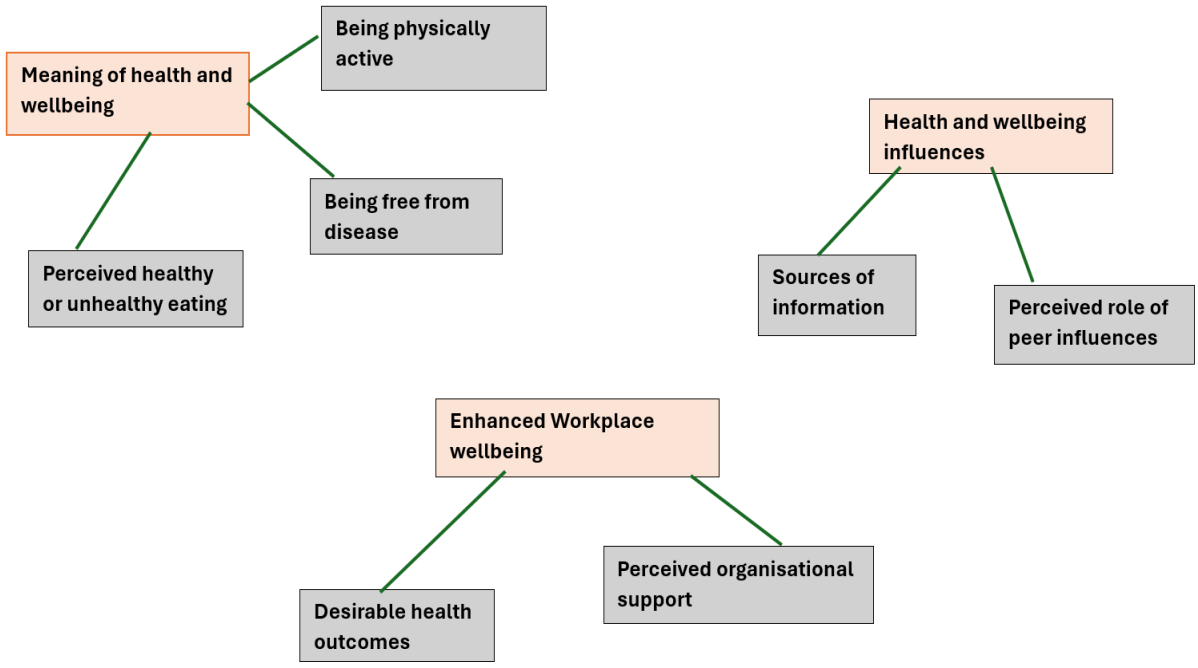

Figure 6: Defining and naming final subthemes and main themes.

Phase six: Producing the report

This was followed by compiling, developing, and editing the compiled analysis to situate it in the overall thesis, including the presentation of findings and discussion of themes to address research objectives and literature. Reporting the themes involved deciding the flow the findings t would follow to best explain how the themes built up from one theme to the next so that the overall account of the study communicates findings while remaining internally consistent.

The first theme I reported was the theme ‘meanings of health and well-being’ because the theme represented the holistic perception of health and well-being for the participants from

which other conversations were built. From the extracts, participants' conversations built up from these main themes, and the rest of their conversations were relatable to their expression of what health and well-being meant to them. The second theme was ‘health and well-being influences’, and the third was ‘enhanced workplace well-being.’

Conclusion.

This research project utilised a qualitative approach to address the purpose of the study. Qualitative enquiry was most suitable as it enables generating an understanding of employer and employees' subjective accounts regarding their perceptions of their health and well-being in the work world. Data was collected from 17 employers and employees who were recruited from two workplace sites. Interviews were conducted using a semi-structured interview guide, and all interviews were audio recorded. Data was analysed using a thematic framework. The chapter describes how data was analysed through each step of the thematic framework, including familiarising with the data, generating initial codes, generating initial themes, defining and naming themes and producing the report. Three final major themes were generated: 1) Meaning of health and well-being, 2) Health and well-being influences, and 3) Enhanced workplace well-being. The next chapter presents the findings of this study, which resulted from the data analysis process.

CHAPTER FOUR

FINDINGS

Introduction

This chapter sets the context for the next chapters that follow and presents the findings of the study. This chapter presents the findings of this research, which sought to explore perceptions of health and well-being in the workplace context. The findings are presented according to themes generated from analysis, as discussed in chapter five. The themes generated from the analysis are summarised in a framework Figure 7. The three themes were: 1) Meanings of health and well-being, 2) Health and well-being influences, and 3) Enhanced workplace well-being.

The findings of this study contribute to the body of knowledge regarding workplace health and well-being in the Kenya context. Through interviewing employers and employees, this study has elicited how workers in Kenya workplaces construct the concepts of health and well-being and how these constructions have shaped their perceptions and views about how optimum health and well-being can be achieved in Kenya workplaces. The literature review of this study showed that although workplace health promotion initiatives have existed for a long time, there is little research done in the Kenyan context to address health promotion and prevention, specifically NCDs, which are a rising burden in the country. Most of the studies that have been done on health promotion and prevention of NCDs in Kenya have been done as quantitative studies, which mainly address secondary prevention of specific NCDs like hypertension or a type of cancer. The contribution of this study's findings, therefore, brings to light healthy populations and how they construct health and well-being, as well as mechanisms that can help involve employers and employees in the prevention of NCDs.

In these findings, employers and employees are not presented as separate groups in terms of their responses. I considered it prudent to combine responses from both employers and employees to account for perceptions of health and well-being. Separating them would fracture the daily work-world interactions that people have in an organisation. For example, discussions about efforts to enhance activity and exercise involved both employers and employees. The issues that affect employees regarding access to healthy food or challenges with time were reported by both employers and employees. However, combining them did not mean that their perceptions were similar, but through the findings, we can see how perceptions in some instances were constructed with a different conceptualisation of health and well-being from the same experience. This interdependency generated the rich world of work in which employers' and employees' health and well-being perceptions are embedded.

The findings illustrated that concepts of health and well-being are multifaceted and diverse but embedded within the context of workplace social interaction, and this is best evidenced by combining employer and employee perceptions. To evidence the findings data are presented according to the main themes and the sub-themes (See Figure 7). Data extracts are presented for each subtheme. An illustration to show how each subtheme is connected to the main theme is also provided before the data extracts are presented. A summary of subthemes is provided, and a final summary for each main theme is also presented.

Employers' and employees' characteristics

This qualitative study sought to understand employers' and employees' perceptions of health and well-being. Employers and employees were able to give a rich account because they had first-hand knowledge of health and well-being in their work world and were able to communicate their views and perceptions articulately and reflectively.

To provide an insight into the participants, Table 5 illustrates the number of participants, gender, category, length of employment and employment responsibilities. To comply with data protection, pseudonyms were used to protect participants' identities and maintain confidentiality.

Table 5 Employer and employee characteristics

	Participant (Pseudonym)	**Gender**	**Participant category**	**Years in employment**	**Responsibility**
1.	Oscar	Male	Employee	Eight	Human resource officer
2.	Amelia	Female	Employee	Three	Account's clerk
3.	Lisa	Female	Employee	Nine	Accountant
4.	Olivia	Female	Employee	Six	Customer service representative
5.	Morgan	Male	Employee	Five	Cleaner/steward
6.	Brad	Male	Employee	Eight	Housekeeper
7.	Nelly	Female	Employee	Eight	Cleaner/steward
8.	Daisy	Female	Employee	Eight	Cleaner/steward
9.	Millie	Female	Employee	six	Housekeeper
10.	willy	Male	Employee	Ten	Operations coordinator
11.	Katie	Female	Employer	Twenty-eight	Human resource director
12.	Zack	Male	Employer	Nine	Sales manager
13.	Adrian	Male	Employer	Three	Finance director
14	Shirley	Female	Employer	Eight	Warehouse supervisor
15	Brian	Male	Employer	Five	Occupation health and safety
16	Zara	Female	Employer	Ten	Steward supervisor
17	Albert	Male	Employer	Three	Logistics manager

Three main themes were generated through thematic analysis, namely a) Meaning of health and well-being, b) Health and well-being influences and c) Enhanced workplace well-being. Figure 7 illustrates the main themes and sub-themes of this study. This chapter discusses the findings and their respective evidence.

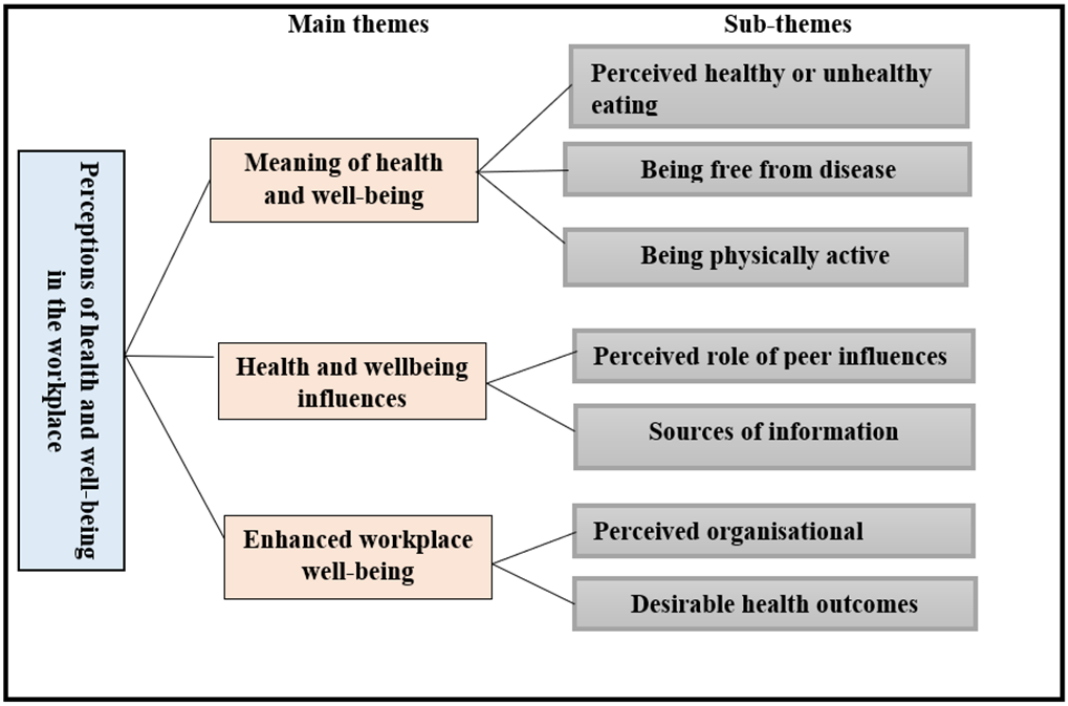

Figure 7 Main themes and sub-themes

Findings

Main theme one (1): Meaning of health and well-being

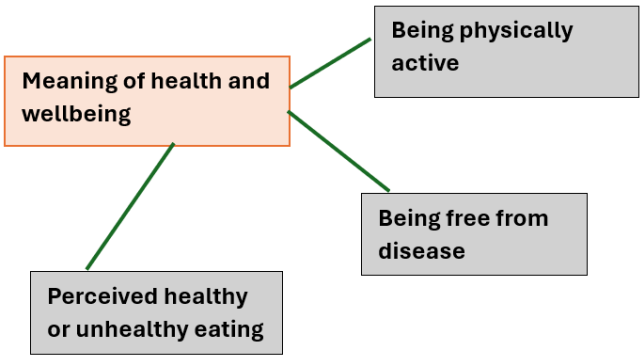

Figure 8 Theme one: Meaning of health and well-being

The first theme generated from the findings was the meaning of health and well-being. Responses revealed that health and well-being are dynamic concepts, which employers and

employees constructed and described using two or three statements, and health and well-being concepts were used interchangeably. Below are excerpts showing examples of statements employers and employees used to say what health and well-being meant to them:

"*It means living a healthy life, maybe exercising, using the right diet, and probably going to the gym or walking, yeah.* (Lisa_EME).

"I think health and well-being means being conscious about your personal health and taking steps to make sure that what you eat in your day-to-day activities contributes towards bringing out a healthy life, and I would also say it is the absence of diseases of any lifestyle conditions" (Katie-EMR)

"I think, for me, it means being healthy and being able to access a balanced diet, living in a conducive environment and being able to access healthcare in hospitals, yeah" (Olivia-EME).

"Well, to me, health and well-being is just being able to accomplish physically or mentally anything that at that age that you have you are supposed to be doing at that time" (Zack-EMR)

"Health and well-being means basically taking care of my health and well-being; it depends on what I have to take into consideration whatever I am taking in, the environment, my diet and also, to some extent, even the physical exercise that I need to do for me to keep fit and to reduce especially the diseases and to reduce the effect that comes with the dieting, lack of exercise and such"(Shirley-EMR).

"All right, I think it is an integral part in terms of the physical healthiness and the concerns also the environment in which someone is actually in. one so you keep healthy physically, environmental aspects that will also facilitate my well-being" (Albert-EMR)

Other employers and employees defined health and well-being with regard to health status. Examples include excerpts below:

> *"Okay, when I say somebody is healthy because you can see him/her when she is working when somebody is sick, you can know this: somebody is sick because they are not able to work" (Nelly-EME).*

> *"Yeah, not being sick, you're strong enough you can do anything, and I think your general living there is nothing that is making you not be comfortable" (Daisy-EME)*

> *"When a person is healthy, he probably doesn't have something that is really disturbing him, like, for example, he has woken up well, he doesn't have any sicknesses. Yes, and you don't have any stress"(Morgan-EME).*

"*It is someone who is okay both physically and spiritually* (Willy_EMR)."

> "*Basically, when we talk about well-being, you are looking at how the staff carry themselves. First of all, I am talking about the employees in our company, and we look at their social well-being, health well-being, and even look at their physical well-being all together"* (Brian-EMR)

> *"When a person is healthy, he probably doesn't have something that is really disturbing him, like, for example, he has woken up well. Even in their lives, you can tell they are healthy and have enough money. If you do not have money, you get some stress, and the stress contributes to those sicknesses"(Morgan-EMR).*

These responses revealed that people's conception of health and well-being often relate to their lifeworld either individually or as a group. According to Cross (2020), individuals have their own health world, which is also influenced by other people's health world. Three subthemes were generated from further analysis of the theme of the meaning of health and

well-being, namely: a) Perception of healthy or unhealthy eating, b) Being free from disease, and c) Being physically active is healthy.

Subtheme – Perceived healthy or unhealthy eating

In the interviews, the employers and employees discussed how they constructed the meanings of a healthy lifestyle, especially in relation to dietary lifestyle. A healthy diet was perceived to be an important aspect of living a healthy lifestyle. Fig 3 shows an example of the thematic analysis process for generating the subtheme.

Employers and employees were of the view that diet can impact health negatively, especially consuming foods that are unhealthy like 'fast' foods, which are readily available and easier to access than healthy foods like vegetables and fruits, as expressed by Katie, an employer:

> *"We would point towards unhealthy behaviour or unhealthy precursors and also the kind of food that they eat, maybe it's a lot of junk food or a lot of fast food as opposed to wholesome cooked food and maybe the taking a lot of processed foods" (Katie-EMR)*

Amelia, an employee, was concerned about the rise in the consumption of processed foods, which are deemed to be unhealthy.

> *"Then also, of course, snacking a lot on junk because I guess you can snack but use (veggies) vegetables which is okay but snacking a lot on junk and then also not taking enough water, hydrating yeah" (Amelia-EME)*

Employers and employees expressed their views about their perception of a healthy diet by describing specific foods or food groups, as seen in the following excerpts:

> *"Diet is very important because for you to be able to live healthily, you need to have a balanced diet, which is just to, yeah, the balanced diet the carbohydrates, the vitamins the proteins, fruits and water" (Olivia-EMR)*

"Diet in terms of what the person consumes, mostly like the person is inclined to maybe let's say if you look at there, what they are feeding on at a particular time if they are like they have like a balanced diet they have (veggies) vegetables, proteins,(cabs) cabbages and in what quantities are they taking more of the cabs or are they taking more of the proteins use the (veggies) vegetables a small portion and then is this person snacking a lot you know are they snacking healthy staff or just the junk, so basically the composition their plate" (Amelia-EME).

"A meal that has three classes is named as wholesome, and that is as natural as possible. Either like salad, second raw but you know again that's not everyday food, but again it could go like if fried and having not deep fried and then having the three classes of food. (Githeri) Maize and beans, fruits, you know, vegetables like this (za kienyeji mboga za kienyeji), the traditional vegetables, sweet potatoes instead of bread, (Nduma) arrow roots" (Katie-EMR).

Nelly, an employee, associated chronic diseases like cancer with an unhealthy dietary lifestyle, as explained in the following excerpt:

"Cancer comes as a result of the style of eating, that's why you get most of the people are diagnosed with cancer, so all of the time you go for the chips, and that is only fats you are adding to your body. You must balance yourself with what you are eating. If you balance your food your body will go on well as a healthy person is somebody at least he must have, you must eat some fruit at least every day you must eat fruit either in the afternoon or the evening or in the morning and the vegetables, and you take water so that your blood can be circulated properly" (Nelly-EME).

Responses suggested that personal responsibility was needed for one's dietary lifestyle. Katie, for instance, did not seem to associate the workplace with enabling dietary choices and

indicated rather that this was an issue with societal awareness and individual behaviour, as she described in the following excerpt:

> *"I think health and well-being means being conscious about your personal health and taking steps to make sure that what you eat in your day-to-day activities contributes towards bringing out a healthy life, and I would also say it is the absence of diseases of any lifestyle conditions" (Katie-EMR)*

In addition, Shirley, an employer, mentioned that following a healthy diet is an important aspect of living a healthy life:

> *"I know I am not keen on a diet, but I need to accept that. If we are to follow the diet the way it is supposed to be followed, I think we would live a healthy life" (Shirley-EMR).*

Thematic analysis also showed that some employers and employees agreed that a healthy dietary lifestyle was important in preventing chronic diseases. Processed foods were described as unhealthy by employers and employees. For Zara, an employee, being healthy means avoiding high-calorie foods, which are associated with poor health.

> *"It's eating food that does not contain a lot of calories, food that will benefit your body. You know, there are other different kinds of foods that we eat, and they affect our health so much. Like taking too much sugar, taking processed food, they have consequences- not like when you are eating local vegetables, it's being healthy to your body" (Zara-EME).*

Moreover, the employers and employees also had a general perception that food prepared at home was likely to be healthier than foods bought at a restaurant or fast-food outlet. A common perception amongst the employers and employees indicated that 'traditional' foods were healthier. Employers and employees such as Shirley pointed out that traditional or staple

foods like maize and beans (Githeri), maize meal and kale, among other foods, were healthy because they were local or cultural foods handed down from an ancestral dietary lifestyle.

> *"Because if you compare like during our grandma, grandparents time, we did not have such diseases because they were doing the… if it was the diet, they were doing the kienyeji (traditional diet) they were going the traditional way yeah" (Shirley-EMR)*

A similar perception was outlined by Willy, who discussed issues related to current food preparation methods, which include additives and more processing, compared to traditional methods, which involve less processed additives.

> *"I am not all that old, but when I look at the past years, there are some things that were not there. For example, in the old days, people used to cook their vegetables and then put milk cream from a cow, and it was enough, but nowadays you have to fry your food and the fats are mixed with even things that you don't know, and then after that, you have to add a lot of flavours like Royco and other things. When I look, I see our lifestyle nowadays and the way life is taking us nowadays. We eat rotten food in the name of food" (Willy-EME)*

The thematic analysis also identified employers' and employees' perceptions about how their food choices are influenced. For example, the social environment in urban areas has an impact on dietary lifestyle because the environment determines or influences food choices. The analytic process highlighted that lack of awareness about healthy diets was thought to have an impact on local dietary habits. So, even for those with awareness, other factors impact dietary lifestyles outside the work environment. The following quote by Shirley illustrates how the proliferation of fast-food restaurants has impacted food choices.

"Because currently, fast-food restaurants have come up quite fast, especially in Kenya, and they are building up, especially in the estates. You find that all we have is a brand of these fast foods in the estates. We have three or four of them in the malls when you are shopping. It's actually very tempting, and when you go with your kids to a mall, they see a fast-food restaurant, and they want to try that burger, they want to try the stuff yeah" (Shirley-EME)

Similarly, employers and employees also highlighted the cost implications and how this influenced food purchasing and dietary behaviour. Employers and employees shared the same perceptions about eating local traditional foods being healthy but also added the impact of cost for the consumer. Lisa expressed her concern that sometimes, although she is informed about the importance of a healthy dietary lifestyle, there is an issue with the cost of healthy foods.

"And then also when you think about it more, the things that you are being told to avoid are the affordable ones- like greens are not that cheap. Like if you want to go and buy two plates of greens so that you don't eat carbohydrates, you spend more. For example, if I bought Ugali fifty bob and wanted to buy greens, I would buy them at a hundred. So definitely you don't have that money to keep up with that pace" (Lisa-EME)

Conversely, according to Millie, an employee, maintaining a healthy diet does not mean buying expensive foods; rather, it is about the right combination.

"Eating well because we have according with what a person can afford, but the locally available which everyone can afford we have the beans, locally available, yes, we have sukuma wiki (kales) which is locally available everybody can afford it like the unga for ugali (maize flour)is locally available, the ngwacis (sweet potatoes) the

Nduma (arrow roots)are locally available then all the cereals beans all those are locally available. So even those who don't have a lot of money can afford at least" (Millie-EME)

Lisa and the employee felt that there is an increasing focus on food groups and the amount one is eating, which sometimes can limit the foods one can eat. This highlights that this was not the case in previous generations.

"A healthy diet is a balanced diet, yeah, a balanced diet and of course, from what people have been discussing now there is the portion issue, yeah. Like if I am eating rice with Sukuma wiki (Kale) and meat, for example, the healthy diet would be maybe two scoops of greens, maybe a piece of chicken and a spoon of rice. I feel like it's very limiting. Yeah. In those days we were eating matoke (Bananas). In fact, you just do waru (potatoes) with bananas, which are total carbohydrates, and you eat. Nowadays, you cannot do that on a plate, and everybody will be screaming at you. It is just that people think you are eating unhealthily when they see your plate has a lot of carbohydrates. Yeah, nowadays it's very open so that everyone will tell you. Of course, there are those days that you feel challenged, but you try. You can try for about a week, but you eat very little, or you may meet your portion, and then, probably along the way, you don't see any change in your body. You go back, yeah" (Lisa-EME).

Participant's responses on the impact workplace environment had on their dietary habits and how this influenced their lifestyle were varied. Some employers and employees, such as Lisa and Nelly, felt that spending all day at work impacted their dietary lifestyle because it limited access to healthy food. Employers and employees work far from their home areas, which necessitates either carrying food from home or purchasing food at the workplace. Lisa, for

example, was concerned that food places at work or near the workplace do not necessarily serve healthy foods. Lisa explained this in the following excerpt:

> *"Okay, in terms of the diet, probably get okay in terms of the diet is about where we do not really have a catering service, so sometimes if you do not carry food from home, you probably have to eat junk, or you get food. There is another caterer who brings, but maybe we don't like their food so yeah, maybe you improve on catering services that we get… maybe think of something" (Lisa-EME)*

Others like Nelly found ways to avoid eating expensive food in the canteens by coming with something to eat from home, which was affordable. Challenges of access to healthy foods led to making decisions to eat for refurbishment more than for health. Ugali is plain maize meal, which is a carbohydrate solely eaten to provide energy, as described by Nelly:

> *"For me, in my station, there are those thermos flasks that have come up for five hundred shillings, so I tell my fellow workers to carry their own tea every morning as they come for work. Because you cannot afford tea all the time in town. Just carry even ugali, and when it is a certain time, just eat and get some energy. Sometimes I also carry, but I don't like carrying*" (Nelly-EME)

Some employers and employees worked in departments where breaks were not clearly defined, so they tended to work all day without going out for a break to have a healthy meal. This was described by Millie, who suggested that this resulted in taking snacks that are not healthy and not having time to rest.

> *"The client doesn't care if I took tea or I didn't, if I took lunch or not, so long as their work is done. So, I might come in the morning, and I have nothing. I will prepare strong tea and rush to the canteen and buy a cake of ten bob, and you see that is not good health, and again lunchtime I prepare strong tea and rush to the canteen and get*

a cake you see that is not good eating I have not taken a balanced diet, and I have to work" (Millie-EME)

Summary of sub-theme - Perceived healthy or unhealthy eating

Findings showed that employers and employees had a basic understanding of nutrition knowledge and attribute awareness to healthy eating behaviours, which was perceived to contribute to optimum health and well-being.

From employers' and employees ' responses, it seems their meaning of healthy eating is based on 1) the type of foods that one eats like '*fast foods*- Katie _EMR'; *traditional foods'*- Shirley_EMR or '*fresh foods*'2) Nutritive value of foods like *vegetables, vitamins, fruits'* (Olivia_EME);3) preparation for example *fried*'; '*the traditional way'* Willy_EMR.

Construction of healthy eating in this way seems to reveal employers' and employees' perceptions of healthy eating categorises eating habits as either "good" or "bad food". However, despite this knowledge, situational circumstances make decisions about healthy eating and food choices complex when one must consider the *availability of food* - Lisa_EME; *time, convenience,* etc. The element of "good" and "bad food" may also be seen as healthism (Mackenzie & Murray, 2021), which can be seen as imposing 'moral values', peer pressure and guilt for those who do not adhere to healthy eating "*we have gone to eat chips -we see what you will do" (Olivia_EME).* However, as relayed by employers and employees, some determinants may impact food choices and influence dietary lifestyle, like the cost of food and a conducive work environment to support healthy dietary behaviours, like the availability of healthy foods in the workplace and breaks to allow times for feeding.

Findings also provided insight about how understanding of nutrition behaviour and its impact on health and well-being translated into daily dietary behaviour. Employers and employees associate illnesses like cancer and other lifestyle diseases with unhealthy dietary behaviour.

Studies done in SSA have shown there is an association between processed foods diet and obesity, which is a risk factor for cardiovascular disease (Holmes et al., 2017; Kumenju et al., 2015). However, none of the employers and employees alluded to knowing national guidelines or advice from a healthcare worker regarding nutritional advice. Countries like Kenya in SSA lack national guidelines on nutrition, and where they exist, the information is often designed for healthcare professionals (Yiga et al., 2020).

Employers and employees indicated that beyond knowledge, there were other factors to consider, including the availability of healthy foods, social and physical environmental impacts like the proliferation of fast foods, the lack of eating places at the workplace and the cost of healthy foods. Nutritional knowledge is important as it forms the foundation which a person can build on to apply nutritional facts to their daily lifestyle. Healthy eating is influenced by an individual's ability to not only acquire nutritional knowledge but also apply it through healthy food choices (Mete et al., 2018).

Employers and employees voiced concerns about the transition from traditional diets to urbanised dietary lifestyles. The proliferation of fast-food outlets and supermarkets has contributed to changes in dietary lifestyle with increased consumption of saturated fats and sugar (Rousham et al., 2020; KBS, 2015). Although African diets, even when traditional, tend to be starch-based (Holdsworth et al., 2020), the concern for employers and employees is that urban diets are often highly processed or refined (Steyn & Mchiza, 2014)

Employers and employees' food choices were also determined by access to food. Being working persons meant they had less time to visit food markets and tended to buy fast foods to save time. According to Reardon et al. (2020), meals taken away from home often tend to be processed and high in carbohydrates, sodium, saturated fats or sugar (Chen et al., 2020). Fast foods, though poor in nutrient value, are an easier choice because they are cheap and

easily available. According to Yiga et al. (2020), the increase in fast-food chains and supermarkets has influenced the dietary behaviours of the urban population, with studies showing its related increase in obesity in urban settings.

Employees in workplaces tend to access food from snack vendors or canteens where available foods are not healthy. When employees have no defined breaks, they tend to eat and go on snacks as they work with no time for full, healthy meals. The work environment can contribute to unhealthy eating behaviours like binge eating, which impact health and well-being (Leung, 2018). Perceptions of healthy eating for employers and employees in this study, therefore, included defining healthy food choices and their views regarding factors that influence dietary behaviours in workplace and community environments.

Subtheme: Being free from disease

As illustrated in Figure 2, the next sub-theme generated for the theme - meaning of health and well-being was being free from disease. The analytical process revealed that employers and employees perceived health and well-being as being free from disease. This is encapsulated by Albert, an employer, who described it as:

> "*To be as a normal person… is when someone is classified as not sick*" (EMR, Albert).

Thematic analysis showed that the rising incidence of lifestyle diseases was a concern for employers and employees. Examples of diseases that employers and employees talked about included cancer, as explained by Amelia, whose friends have been affected:

> "*Cancer, cancer has become like… I know so many people all over sudden there are so many cases until now it is getting, I personally know people who have suffered cancer who either passed on or who are currently suffering" (Amelia-EME))*

Similarly, employers and employees expressed their concerns regarding lifestyle diseases like diabetes, cancer and hypertension, as seen in the following excerpts:

> *"Then we have these major ones like the ones people are afraid of now there is cancer and all that. High blood pressure, hypertension, obesity is also a disease" (Millie-EME)*
>
> *"Yeah, that is diabetes, cancer, what the medical guys call the lifestyle diseases, high blood pressure, anxiety and depression…Yeah" (Zack-EMR)*
>
> *"Basically, the disease that is trending right now number one is cancer, then, of course, we have the issue of diabetes and hypertension, then another disease should be basically cancer is number one and issues of HIV/AIDs" (Brian-EMR)*

Similarly, Oscar, in the excerpt below, expressed his concern regarding the rise in lifestyle diseases.

> *"Problematic we have one is the high rise of lifestyle diseases. High blood pressure, diabetes, cancer is the most common one, obesity… sure" (Oscar-EME)*

In addition, Katie, an employer, expressed her concern because of the high prevalence of lifestyle diseases among workers who were suffering from issues related to cardiovascular disease, where some resulted in fatalities at work. She narrated her concerns in the following excerpt:

> *"We see an increase in lifestyle diseases. You see, people are getting diabetes at an earlier age, high blood pressure, or high cholesterol, leading to other conditions. I have also seen a higher (inaitwa) is it called mortality rate. From what heart attacks have seen, especially this past year, it has been quite… in my cycle, we have got several people who just came over and died because of heart attacks" (Katie-EMR)*

Amelia noted that obesity was related to a sedentary lifestyle and poor dietary habits and led to cardiovascular events like heart attacks, which even affected the younger generation by saying:

> *"Yes, of course, and heart attack, you know, the cholesterol levels in the body go up, then you will see even kids getting heart attacks, which are quite unfortunate so that I would say that heart attack, of course, and then you cannot really know perform your duties well, and you know fatigue and you find even someone now who is already obese for them to actually carry out an activity it takes a toll on their body or they get fatigued easily and so that also affects their lifestyle. In terms of course obesity, they say that if small children are not feeding the right staff, then they are not going out to play. They are busy with gadgets, so they sit in the house with the gadgets, snack, eat sausage, and do all this. I come from school, and you know the quick one to give these cookies and sweets" (Amelia-EME)*

Responses from employers and employees regarding the subtheme freedom from disease also included perceptions about the work environment, which can also impact workers' mental health status. According to one employer, Zack, persons who are unable to focus or engage in given tasks at work may be having mental health problems. Zack discussed how anger is an occupational problem which is related to stressful situations at work.

> *"Anger is also an occupational problem in terms of piled up stress that would create someone just feeling like the best way not to continue being… feeling stressful would be to repulse back anger or to an outburst or maybe probably it is something that is in that person from the beginning of time so it's something that needs to be managed and those I think a time usually goes to stress management classes to be able to handle such" (Zack-EMR)*

Stressful working conditions were also discussed by Adrian, an employee, as an inability to cope with workload, which can result in mental health challenges:

> *"Having a lot of workload fatigue, so all those will be compromising the mental health of a person" (Adrian-EME))*

Having a spiritual connection with a higher 'being' was seen as important by one employer participant who indicated that spiritual well-being helps him to cope with stressful situations better. The following quote illustrates the response from Willy:

> *"So, a healthy person, I can say that it's a person who is okay without any stress or sicknesses and such kind of things. Somebody who is okay both physically and spiritually.... What I mean is that when a person is healthy spiritually, I mean that this person will have no stress. They will not disturb themselves when anything happens in life. They will understand why, and they know how to come out of that" (Willy-EMR)*

Employers and employees also described how financial health was also key to employee's general health and well-being. Not being able to have enough finances to afford food and social amenities and meet family needs was a concern and a cause of stress. Access to healthcare directly impacts the management of the disease. Being able to have health insurance coverage was important to employees as it meant they had the financial capacity to pay for treatment without stress. The following quote from Olivia highlights this:

> *"Yeah, access means like you have funds to pay for your treatment, so that could be in terms of like cash-cash or in terms of like an insurance card, yeah" (Olivia-EME)*

For others, financial health also enables a person to afford basic family needs like food and healthcare. Examples of employers' and employees' comments are in the following excerpts.

> *"If you have something in the house, nothing is disturbing your mind. You know you will do your work for eight hours, and when you go home, you are just free. You do*

not have any stress in your mind. But if you don't have food in the house and you have somebody who is sick, maybe your child or mother, you will be having stress". (Nellie-EME).

"If you don't have money, you get some stress, and the stress contributes to those sicknesses" (Morgan-EME).

Sub-theme summary - Being free from disease

Employers and employees' construction of health and well-being meanings indicated perceptions that mirror the biomedical definition of health. Perceptions leaned more on negative definitions like 'not being sick' or 'you do not have any stress'. This portrays employers' and employees' desire to avoid poor health outcomes rather than achieving good health outcomes. Employers and employees gave examples of chronic diseases and rarely mentioned minor illnesses like a common cold. This may indicate that lay persons often do not consider minor illnesses as diseases did not mention them. Diseases considered as a concern for employers and employees were cardiovascular disease, cancer, and mental health problems related to stress. Employers' and employees' concerns mirror concerns in Kenya, where NCD prevalence is on the rise and has been targeted by WHO for mortality reduction by 25% by 2025 in Kenya and other SSA countries. (Subramanian et al., 2018; WHO 2017).

Employers and employees' construction of being free from disease included identifying chronic diseases, which some collectively described as 'lifestyle diseases' or used words like 'obesity'. This may indicate their perceived notion that the diseases are preventable. For example, Millie's mention of obesity as a cause of cancer caught my interest. Katie and Oscar also mentioned that "Obesity is a problem". Obesity is one of the risk factors for non-communicable diseases like diabetes and hypertension and is a major global concern. Obesity is also related to high mortality and morbidity, as well as the high cost of related disease

management (Mkuu et al., 2021; Paul & Stephen, 2017). It is, therefore, not surprising that most people consider obesity to be more of a disease rather than a risk factor (Saavedra, 2021).

Perception is an important part of behaviour in health promotion as it is likely to lead to action or inaction towards healthy lifestyle choices (Visscher, 2017; Okop et al., 2016). None of the employers and employees discussed their personal risk of chronic disease as they discussed chronic disease risk in general. Self-perceived risk has been shown to affect health-seeking behaviour and behaviour change in studies done on the African population (Guariguata et al., 2014).

According to some employers and employees, the other factor impacting health and well-being is the cost and access to health care. Being free from disease can be impacted by the affordability of healthcare services, which in Kenya is quite high for those with chronic diseases (Subramanian et al., 2018). Being free from disease is therefore important because quality of life is not assured once one becomes ill. Consequently, these perceptions relate to other sub-themes within the main theme -the meaning of health and well-being. For example, perceived benefits of a healthy diet showed that employers and employees connected maintaining an unhealthy dietary lifestyle with the risk of disease. As we will see in the subtheme on being physically active, a sedentary lifestyle was related to poor health and risk of disease.

Subtheme - Being physically active is healthy

The third subtheme in the main theme of the meaning of health and well-being illustrated employers' and employees' perceptions about being physically active at work. Thematic analysis evidenced that workers constructed being physically active to be closely related to health and well-being. Employers and employees expressed that this also had an impact on

worker output and general health. Shirley, for example, expressed it in the following excerpt like this:

> *"To some extent, even the physical exercise that I need to do for me to keep fit and to reduce diseases, especially the effect that comes with dieting, lack of exercise, and such*. (Shirley-EMR)

Similarly, Brad, an employee, perceived that exercise has a role in enhancing workers' health, as described in the following excerpt:

> *"Yeah, we have activities like maybe going to the gym and maybe early in the morning, maybe being a footballer and going to the field to play, you know, when you do all those activities will make you healthier. One thing that we can do as workers to improve our health is to encourage them to do a lot of exercise. Those are the things that will lead them to be healthier"* (Brad-EME)

Employers and employees noted that although some jobs encouraged sitting all day, others enhanced physical activity. Jobs that required walking or being on your feet all day or those that required one to engage in physical activity. Brian, an employee, explained that physical fitness was important for the workers because of their manual nature of work. Consequently, the company encourages employees to maximise their fitness by walking as much as possible. Brian explains this below in the excerpt:

> *"Physical fitness is very important because when you conduct those physical exercises, you can at least burn the excess fats in the body which you know have some negative effects over time because sometimes you can end up having hypertension and high blood pressure and all sorts of the things. The normal things that we do are, number one, doing physical exercises to ensure that you are just physically fit … and*

something else that we do is do more of walking and not sitting all the time and using vehicles" Brian-EMR.

For Katie, obesity impedes her physical capacity and capacity to do physically demanding work.

"A person is healthy if they don't have sickness or condition that renders them towards not being well hundred per cent. Sometimes, I fall in that category (laughs), and the size depends on whether they are big. When their height and weight, whether they are big, never come into play unless the size is hindering them in performing or doing some things like maybe doing some things like being slow due to their size or being unable to do some aspects of your work because of your weight" (Katie-EMR).

The analysis also showed that employers and employees thought that physical activity was important for overall well-being, and they related this to personal lifestyle behaviours. They attributed sedentary physical inactivity to a lack of personal initiative. Amelia, for example, explains in the following excerpt that:

"I would say if you loved a sedentary lifestyle, then you do not exercise, or you don't take part in any physical activity and you see, for us, we are seated in the office all day. You get into your car, and you go home. You are sitting on your coach, you go to bed, so I would term that as unhealthy if you don't get, make time to go and do some physical activity" (Amelia EME)

Others, like Brad, added that personal behaviour was a contributor to the amount of physical activity they engaged in. He talked about how most workers prefer to use public transport to work instead of walking, which he considered to be healthier. He talks about this in the following excerpt:

"You know, some people sometimes you will find it is very hard for somebody maybe to walk even from here to town you get most of them they want to use a 'mat' (public transport), they want to use maybe the bus- now where the problem is, this body when, you know most for the time are you rest, yeah maybe you will find the blood circulation is not circulating normally and when these people when they walk a bit, they fall sick. You know, we encourage them to know that it's not necessary to use 'mats' from one point to another. It is also good to be walking" (Brad- EME).

There was also the perception that young people should be more active than older ones. However, Zack, an employer, felt that although younger people are expected to be active, each person should be active across the lifespan, as explained in the following excerpt:

"Yeah, say somebody aged between 20 years and 30 years should be very active physically and doing stuff, I mean, that requires a lot of physical activity between 30-40years mental activity, a sharp mind and 40 years onwards should be sharp minds as well, but still again even when you are above forty you should still be physically fit of course not as strong as 20–30-year-old but physically fit nevertheless yeah" (Zack-EMR)

Others, like Katie, argue that sometimes physical activity at work depends on the type of work one is doing and the environment. For instance, Katie's work as a human resource head is desk-based. The enablers for physical activity at work were therefore important to consider regarding an individual's activity level. Katie discusses this in the following excerpt:

"Lifestyle behaviours would be… that is a bit hard to judge because it would fall towards what is their work practices because you find lifestyle wise maybe you sit the whole day in the office. Work that requires you to sit the whole day, so we can't say you are unhealthy because you are sitting the whole day. Yeah" (Katie-EMR)

Thematic analysis also showed that employers and employees perceived that the workplace environment plays a key role in enhancing physical activity. However, time was seen as a constraint, as it was related to workload patterns, commuting to and from work, and family-related activities. Lisa, an employee, expressed her views as follows:

> *"Sometimes it's like it's too much on time. Time is a real issue because, mostly, when you are a working person, you have to leave early to get to work early. When you leave work, you get home late, and it's probably because you are a family person that you cannot start leaving your family to go and do gym; you don't have that time. There are times we engaged a sports club nearby, and the company had even gone ahead and negotiated so that we get subsidized rates, and the members actually joined the club, and we did that for like a year. However, still, because I think of this issue, I was talking about time- some members will never go there, and you are paying. So, it will appear that it is not giving the results that were expected. So, of course, we withdrew from that (Lisa-EME).*

In addition, according to Albert, the workplace was also seen as a contributor to the level of physical activity one was able to engage in where the employer needs to create an enabling environment, as mentioned in the excerpt below:

> *"All right, I think it's an integral part in terms of the physical healthiness and the concerns, as well as the environment in which someone is in. So, attributes of which will keep me healthy physically, environmental aspects that will also facilitate my well-being" (Albert_EMR)*

Other employers and employees agreed that physical activity is important for their health and well-being and take physical activity as a personal responsibility, so they have protected time when they do exercises but agree that this has to be done outside work time as described by Olivia:

"I encourage people to eat healthy and to exercise. I also exercise a lot on Saturdays. I normally go to karura (nature park). I just walk around or jog, and wherever I get time in the evening, I go to a nearby field to just jog and walk" (Olivia-EME)

In addition, Nelly talked about utilising work activities to increase walking opportunities. Her work as a commercial cleaner requires moving to several buildings, which allows her to walk instead of using a car. Nelly, in the excerpt below, felt that the nature of their work gave them enough opportunity to be fit; therefore, they did not feel there was the need to do deliberate outside work activities like exercising.

"But for me, I do exercises. I walk in this Nairobi, and that exercise is enough for me. (Laughs) Because I have six stations to work, when I walk, by the time evening comes, I have done enough exercises. When I go on leave, I usually add weight, but when I come back from leave, I ensure that I have reduced the weight and kept the weight that I want to maintain. So, when I walk in the streets, I am not stressed up" (Nelly-EME)

Zack had an interesting view of physical fitness. He perceived that expectations for physical fitness should correspond to a person's chronological age.

"Not overweight. Ahh, whatever health professionals nowadays call body mass index, so being in that state and then being active. Yeah, say somebody between 20 years and 30 years old should be very physically active and doing stuff. I mean that requires a lot of physical activity between 30-40years mental activity, a sharp mind and 40 years onwards should be sharp minds as well, but still again, even when you are above forty you should be physically fit… of course not as strong as 20–30-year-old but physically fit nevertheless yeah"(Zack-EMR).

Summary – subtheme: being physically active

Employers and employees constructed health and well-being as being physically active. Physical activity was deemed important to general health outcomes and level of productivity at work. Employers and employees refer to a healthy person as one who is physically active or appears active, and persons who are slow and not active at work are considered to be unhealthy. Physical activity is often seen as an effective strategy for the prevention and promotion of health and well-being (Ryde, 2020). Increasing physical activity among adults is known to have the potential to reduce the impact of NCDs on employers and employees (Saqib et al., 2020). Most employers and employees reported that they viewed a sedentary lifestyle as contributing to lifestyle diseases like diabetes and high blood pressure. These assumptions are supported by literature as physical inactivity is associated with cardiovascular diseases and cancer, which result in reduced life expectancy (Malm, 2019; Torres, 2020). Employers and employees alluded to the importance of personal responsibility in making sure one remained active at work. However, desk-based workers felt that they were restricted by the nature of their work and required the employer to provide protected time when they could engage in physical fitness activities.

According to Clemens et al. (2014), workplace physical activity is lowest among desk-based workers. However, increasing work-based physical activities can have positive effects on musculoskeletal pain, anxiety, and general work performance (Moreira-Silva et al., 2014). Employees who worked as commercial cleaners perceived themselves to be physically active because they were engaged in daily physical labour, which allowed ambulation. Baup et al. (2022) term this incidental physical activity and see it as a promising solution to enhancing physical activity in the workplace. Employed adults spend most of their day at work, which makes workplaces suitable locations to enhance physical activity and enhance the general health and well-being of employees (Diaz-Beni, 2020).

Time constraints were a challenge because there was no protected time at work for physical activities like visiting the gym, and employees had to find time out of work to exercise. Furthermore, according to employees, lack of time to exercise is a barrier that results in a low rate of participation in work-based physical fitness activities. A systematic review by Bale et al. (2015) showed that time is a significant factor in enabling workers' utilisation of physical activity resources or interventions in the workplace. Workplace settings can impact the ability to participate in physical activity. For example, workplaces where time is given by supervisors or flexibility to attend offsite facilities are likely to increase interest in enhancing physical activity (Tabak et al., 2016; Thomas et al, 2021).

Although there is awareness about the importance of physical activity and exercise, most employers and employees do not seem to have any deliberate plan or strategy to improve their physical activity. Studies show that employees who perceive themselves to be physically active tend to achieve better engagement in physical activities even when the environment does not give direct support. Other studies indicate that self-perception regarding physical activity is reciprocal to a conducive environment (Bale et al., 2015).

Quotes: Being physically active is healthy

Summary of the main theme one (1): meaning of health and well-being

This section presents findings related to the theme of health and well-being. The responses that contributed to this theme primarily reflect employers' and employees' perceptions of health and well-being in the workplace. Their discussions reveal individual health behaviours, emphasizing how they perceive health and its impact on their daily routines. For example, employers and employees mentioned personal preferences for certain dietary lifestyles and foods. They also discussed healthy lifestyle habits like physical activity and exercise, particularly in the context of the challenges they are facing.

Employers' and employees' perceptions of health and well-being were further shaped by individual health beliefs, influenced either by cultural traditions or current experiences within the workplace. These individual characteristics are crucial for the future implementation of interventions aimed at enhancing health and well-being in the workplace. The individual is central to developing holistic interventions that benefit both employees and employers within the broader social context of the workplace, as illustrated in Figure 11 of the conceptual framework.

The findings also showed that employers and employees had a basic understanding of nutrition and its impact on health. Their understanding of healthy eating was based on the perception that food is either healthy or unhealthy, with traditional diets assumed to be healthy because they are unprocessed. Processed foods were perceived as contributing to diseases like cancer. Employers and employees noted that factors beyond knowledge, such as the proliferation of fast food, influenced dietary behaviour. For example, fast food, which is often processed, is readily available, even in the workplace. Additionally, the high cost of food sold at work leads employees to choose cheaper, processed options. Employers and employees did not appear to have any knowledge or perceptions regarding government nutrition guidelines.

Employers and employees also perceived health as being free from disease. They identified non-communicable diseases (NCDs) as the most prevalent in Kenya despite the continued prevalence of communicable diseases. NCDs were considered lifestyle diseases resulting from poor health behaviours such as a sedentary lifestyle, poor dietary habits, and obesity. However, none of the employers and employees discussed their health status or expressed awareness of the diseases they might be personally at risk.

Being physically active was also seen as essential to health and was associated with positive lifestyle behaviours like going to the gym, walking, and participating in marathons. However, participants emphasized that maintaining physical activity requires self-motivation and personal responsibility. They viewed the availability of amenities to support exercise, such as subsidized gym memberships and time off for exercise, as important for sustaining physical activity at work.

The next section will highlight evidence for the theme of health and well-being influences in the workplace.

Main theme two (2): Health and well-being influences.

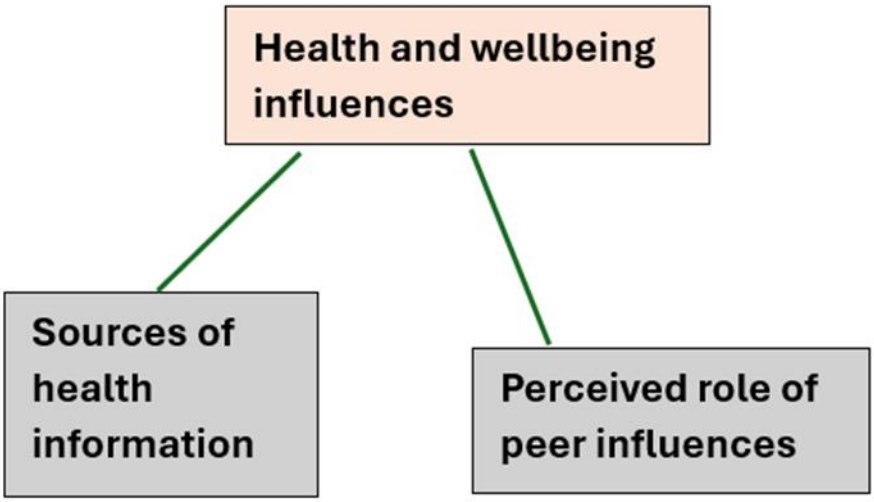

Figure 9 Main theme -Health and well-being influences

The second theme generated through thematic analysis was Health and well-being influences. Employers and employees identified peers and sources of information as important influences that had an impact on their health behaviour. Healthy lifestyle influences are an important component of workplace health promotion as they provide support at work to engage in healthy behaviours (Edmunds & Clow, 2015). Thematic analysis showed that employers and

employees highlighted the important role their peers play in enhancing healthy lifestyles, especially encouraging healthy dietary lifestyle." *I encourage people to eat healthy to exercise"* (Olivia-EME) and engage in physical activity "*one of the guys is a young man*, *very fit. He sought of inspires everybody*" (Zack-EMR). Support from work colleagues influenced employers and employees' engagement in enhancing their health and well-being through sharing information, encouraging participation in exercises, and being motivators for action. Further analysis of the theme generated two subthemes: a) Perceived role of peer influencers and b) sources of information.

Sub-theme -The perceived role of peer influence

Employers and employees reported the significant role that peers play in raising awareness among colleagues. Peers encourage employees to join activities like running in marathons, going for nature walks, and exercising regularly. Zack, an employer, provided an example of colleagues influencing others in the following excerpt:

> *"It has entirely improved their well-being, and it also fosters teamwork because they do it together. One of the employees is a very fit young man, and he inspires everybody, as now everyone strives to achieve the fitness level of that particular person" (Zack-EMR).*

Employees use various methods to encourage their colleagues to get involved in health and well-being activities, such as jogging. Olivia gives an example of peer influence at her workplace, as evidenced in the excerpt below:

> *"I know of a colleague in the end office, and even here, I know a gentleman in quality control who really encourages people to go jogging. He started a WhatsApp group called 'Operation Fit,' where he mobilizes colleagues to come out and jog. We usually go as a group to Karura as colleagues, so he has done a lot of work in getting people to exercise" (Olivia-EME).*

Despite the lack of formal fitness activities at work, employees find ways to work out after hours or on weekends. They also raise awareness about the benefits of physical fitness. Working together as a team enhances collective health and well-being, as explained by Katie, an employer:

> *"I have seen health awareness initiatives where they team up, and you find them running on Saturday mornings in informal settings, challenging each other" (Katie-EMR).*

Peer influencers can also be instrumental in encouraging colleagues in other areas of health and well-being, such as promoting healthy eating habits. Zara explains this in the following excerpt:

> *"For example, if you see a co-worker eating chips daily, you can caution them that if they continue, certain health issues may arise, or if someone consumes a lot of sugary things, you can be in a position to warn them" (Zara-EME).*

Olivia, an employee and a nutrition advocate at work, encourages others to adopt a healthy lifestyle, as described in the excerpt below:

> *"I encourage healthy eating, and while it's okay to indulge occasionally, I emphasise drinking plenty of water. I take a lot of water, and this year, two of my colleagues have adopted my habit. I keep a big bottle on my desk, and they admired it so much that they brought their own bottles. Sometimes, they forget to refill, but I keep encouraging them. I also exercise a lot. For example, on Saturdays, I usually go to Karura to walk or jog, and whenever I get time in the evening, I go to a nearby field to jog and walk" (Olivia-EME).*

According to Lisa, motivation from team members working together influences people to participate in health and well-being activities in the workplace, as evidenced by the excerpt below:

> "*When there are people together, there's more motivation than when you're alone. For instance, if we had a gym space here with equipment, people could encourage each other to go for 30-minute sessions. But if everyone is told to find their own gym, it's different. Togetherness motivates people to take action" (Lisa-EME).*

Some employers and employees agreed that peers are beneficial for the team and that their role in encouraging everyone to focus on their health is important. However, they cautioned that sometimes peers can become too judgmental, which may discourage others, especially regarding dietary choices. This can create friction within the team when some employees feel guilty about eating something unhealthy. Lisa, an employee, expressed her concern in the excerpt below:

> *"If you eat what we used to eat, like bananas (matoke) and potatoes (waru), which are total carbohydrates, nowadays you can't do that without everyone screaming at you" (Lisa-EME).*

Similarly, Olivia, who encourages her colleagues to eat healthy, was concerned that her peers sometimes see her as being judgmental about their dietary habits at work. She shares her experience as follows:

> *"I would speak on my behalf because I'm really into nutrition. I encourage healthy eating, and my colleagues will tell you, for example, today they were going for lunch, and they said to me, 'We're going to eat chips, let's see what you'll do about it'" (Olivia-EME).*

Some employers and employees appreciated the peers in their team who motivated them to improve their fitness. In addition, peers can be useful for enhancing mental health, especially by being available for colleagues who need someone to talk to during stressful times. According to Nelly, an employee, people sometimes go through stress unnoticed and are unable to share their issues with others, as evidenced by her discussion in the following excerpt:

> *"I will ask the person, 'Do you have any issues?' If they say yes or no, I will tell them to let me know what's wrong so I can help. I can't work with someone who is burdened by something in their heart" (Nelly-EME).*

Similarly, Millie, another employee, adds to the expanded role of peers in enhancing mental health:

> *"I think it's not good if you have an issue and need advice, but there's no one there for you. That issue will remain a problem for me and won't be solved" (Millie-EME).*

Zack talked about peers who are role models, noting that others see them as healthy and are influenced to emulate their healthy lifestyles:

> *"It first starts as admiration; if someone is healthy and appears well, others are attracted to them. The first influence is admiration from others who want to emulate what they see. Healthy people tend to perform better at work, and managers can then discuss health issues with their staff" (Zack-EME).*

Summary of sub-theme – perceived role of peer influencers

Thematic analysis has shown the potential peers have in enhancing participation in health and well-being activities and influencing workers to be part of an organisational health and well-being culture. According to Van der Put et al. (2021), the workplace is a social environment where employees may influence their health and well-being as role models due to their

frequent interaction and closeness. In the subtheme 'perceived role of peer influencers', workers found motivation in the team effort to enhance health and well-being through maintaining physical exercise and a healthy diet. Peer influence and encouragement of employees to be physically active were valued, as they enabled shared identity and social interaction, which enhanced participation. Employees who perceive that their peers value healthy lifestyles are more likely to adopt healthy behaviours (Burke et al. 2018). There was the perception that sometimes influencers were judgmental, which may discourage participation.

According to Edmunds & Clow (2016), the workplace is an important setting for promoting health and well-being, and existing social structures can provide avenues for building interventions with peers who take on the role of facilitation. Although employees reported peer influences were mainly about enhancing healthy behaviours like diet and physical activity, some employees perceived that mental health was an important part of their work life. For example, being able to speak openly about stressful experiences and receiving co-worker advice was seen as a way to reduce stress at work. According to Rajeswari & Magesh (2017), relationships with co-workers are key to social well-being and creating a healthy work environment. Stress at work can also impact psychological well-being, and conducive workplace relationships contribute to enhanced motivation and confidence levels for employees (Aryan et al., 2017; Saka et al., 2018).

Sub-theme - Sources of health information

The thematic analysis identified that sources of health information were from social media and also from professional sources like health talks. Information also comes from external sources, such as health talks organized by health insurance companies, as described by Oscar in the following excerpt.

"We normally organize health talks, and we call up our partners. We are covered by Jubilee insurance, so twice we have called them, we have talked for a whole day, you know" (Oscar-EME).

According to Katie, employees are more aware of their health when information comes from various formats, but it is not easy to know which information is correct.

"I think it's a higher awareness about their health. There is a lot of noise in the space about what is healthy and what is not and how… I believe a lot of it is driven by weight management, not really necessarily about I am unhealthy. Let me be healthy. Then you find a lot of it is coming from weight management, although for the men, now then it's a flipside, it's more about keeping fit, and so that is what is pushing. Social media also is playing a very big role, because you find a lot put on Facebook, WhatsApp, or Instagram that talk about the various methods of …is also influencing" (Katie-EMR).

However, some employers and employees shared concerns regarding the accuracy of information and the effectiveness of changing health behaviours. For example, Katie explained that though employees had access to health information, she felt that the information revolved around what is healthy and what is not.

The main source of information is from social media, which most employees have access to but may not necessarily be correct or reliable. Katie's comments are in the excerpt below:

"Social media also is playing a very big role because you find a lot put on Facebook, WhatsApp, on Instagram that talk about the various programme…I would say maybe 50/50. I feel that sometimes you find some are really aware of and knowledgeable about keeping healthy and fit. Others follow fads, and there is a second group that is a bit at risk because they follow without understanding its importance. Sometimes,

whatever it is they are choosing to follow, it might not be healthy for them, so there is the habit of a risk there" (Katie-EMR)

Lisa, an employee, shared the same concerns regarding the accuracy of health information shared in the workplace. Unverified information shared with colleagues as sound knowledge may pressurise peers to act on the information. This can cause friction among employees or confusion as to what the correct information is. Lisa expressed her concerns as follows:

"It's only that sometimes it's too much nowadays on the food issue until it's not clear whether actually what we are eating is all unhealthy or do people make it up" (Lisa-EME)

Similarly, Willy shared his concern that sometimes people have health information, but they do not change their behaviour as a preventive measure to avoid disease.

"When a person is told that this thing is bad, they should understand and get to know and that you should not try it so that you can see it by yourself at least try to understand. When you are told that something is real, and it is there even if it has not affected you, at least you should try to use the available protective methods so that you are not affected by such problems" (Willy_EMR)

Thematic analysis showed that some employers and employees perceived health information as important for personal lifestyle decisions and the prevention of disease. Amelia explained as follows:

"Of course, it is important because this is now a prevention measure. Before you get to the hospital, you can get the information, and then once you are informed, it will be easier for you to make a decision and the lifestyle so that you prevent- you eventually not having to go to the hospital after getting sick. So, it is important because the health workers are also very informed this is their field, so I think it is a good initiative" (Amelia-EME)

Similarly, Zara, an employee, perceived health information as useful for the prevention of disease and initiating behavioural change, as evidenced in the following excerpt:

> *"To me, I can say it is like they can be going around ensuring that they know the kind of food that they are supposed to take and the things that they should avoid because you get some diseases people get out of lack of knowledge. There are those who eat things without knowing if I eat too much of them. The consequences are this and that. So, if they are aware, it could be preventing some diseases" (Zara-EMR)*

The analysis also identified participant's views regarding where they would want to source health information, as shown in comments from Lisa:

> *"From all sources, social media. Yeah, a reliable source. If you eat these three types of fruits, then it is not healthy to eat that type of fruit. Like people who have been trained on nutrition, yeah" (Lisa-EME)*

Amelia, an employee, would prefer health information to come from professional sources that know a given area of health and well-being, such as nutrition. She comments as follows:

> *"So maybe from particular people who are knowledgeable about nutrition and well-being, they can be able to share the information with the employees" (Amelia -EME)*

Some employers and employees, like Zack, gave their views about how their organization can enhance sources of health information in the workplace:

> *"Yeah, health education programmes, seminars and provision of information. It could be a newsletter or something like that. Maybe something sent centrally from the company to tell people about- you don't really have to do a full-time… it can be a read message maybe from global human resource and all that about health and health awareness and all that" (Zack-EMR)*

Similarly, Adrian proposed establishing an enabling environment for the provision of health information sources like health journals and information platforms, as evidenced by his discussion in the excerpt below.

> *"I think the most critical thing is trying to sign up for those regular journals. We call them regular journals or write-ups on matters of health, so when you get those journals or those write-ups, you can share them with employees. You can create maybe a platform where people are able to access information, or you can create a health desk where you are able to put all that information related to health, or you can be able to refer the employees to certain organisations that are able to provide the things to do with health or a health organization" (Adrian-EMR)*

Brian talked about ways in which his organisation ensures that health information is disseminated through health talk programmes.

> *"The programmes we have mostly health talk programmes that we invite the health experts to come and just talk to our staff on issues health and in this case, we have had sessions on HIV/AIDs, we had sessions on just having a session on lactating mothers, first of all, we had a session with the staff to know what a balanced diet is because every time the company kept engaging our staff that for you to live healthily, you need to have a balanced diet and make sure when you are having the food make sure that the food is balanced and another programme that took place is just awareness training to our staff on issues on the issues of the general health and safety and so far it has been better" (Brian-EMR).*

Other employers and employees like Willy and Albert felt that health information could be sourced through doctors and lecturers offering expert information on health and well-being, as seen in excerpts below:

"Okay, they say information is power, and there are some people who are struggling health-wise because of lack of that information, so most of the time, what I can say is that if the doctors were in place and then they be planning meetings with people" (Willy-EMR)

"Provide material with the literature of a probably common room like where people might be sharing ideas aspects like using a projector, lecturers should be able to be coming in to do the talks, clinics through HR "(Albert -EMR)

Summary sources of health information

Thematic analysis also showed that access to health information came from random sources, often shared from social media sites or opinions from peers. However, the sharing of unverified health information raises concerns about the harmful effects this information may have on people's health perception, decision making and health behaviours (Alduraywish et al., 2020). Some were not sure if unverified information was useful. Having reliable sources of health information is important for developing foundation knowledge on disease prevention and behaviour change (Battineni et al., 2020). There is increasing evidence from random sources. However, reliable verification of these sources is lacking, raising concerns (Tengstedt et al., 2018). Employers and employees did not seem to seek health information directly from health professionals. However, they expressed the desire to receive information from health professionals through health talks. According to Chiu et al. (2022), even when information is made available on social media by verified health professionals, there is a need to educate the public on how to locate, evaluate, and appropriately utilise the information. Peer influence is often subtle and does not necessarily require physical contact because information can be shared in other formats, like through social media.

Summary of main theme two (2): Health and well-being influences

The workplace is a social environment where workers have the potential to influence each other's behaviour. This theme showed how, though employers and employees have their individual health beliefs and health behaviours that explain their perceptions of health and well-being, they also have interconnected with the social interactions in the workplace context. Inter-personal interactions influence employers and employees in various ways. Employers and employees showed how peers challenged certain health behaviours and beliefs, which influenced them to think differently and sometimes feel the need to protect their perceptions. For example, an employee was always challenged to eat more healthy food than chips, so every time, she would act defensibly to avoid being challenged about it. Role models also contributed to collective perceptions of health and well-being, as in the case of role models who encouraged the team to go out and engage in activities and exercise.

Employers and employees in this study talked about the role peers play in influencing their behaviour with regard to healthy lifestyles, including encouraging them to participate in physical activities and maintain a healthy dietary lifestyle. Inter-personal influences were also elicited in the way information about health and well-being was shared among employers and employees. The use of social media and open discussions at work about health and well-being influenced health beliefs and behaviours but also increased socially based health and well-being activities within the workplace. According to Pruckner et al. (2019), studies indicate that the workplace environment influences individual behaviour where social norms, health information and the importance of team effort can be shared.

The theme of health and well-being influences shows how interpersonal interaction contributes to or influences individual behaviour and the existing interconnection with individual behaviour, as illustrated in Figure (11). Peer intervention in diet, activity and exercise was perceived to impact individual behaviour. Peer pressure also influenced

individual behaviour as role models and health champions challenged employees and employers to engage in healthy behaviours figure (11). The next section shows the findings of the third main theme and discusses evidence regarding employers' and employees' perceptions of enhanced workplace well-being in regard to perceived organisational support and desirable health outcomes.

Main theme three (3): Enhanced workplace well-being

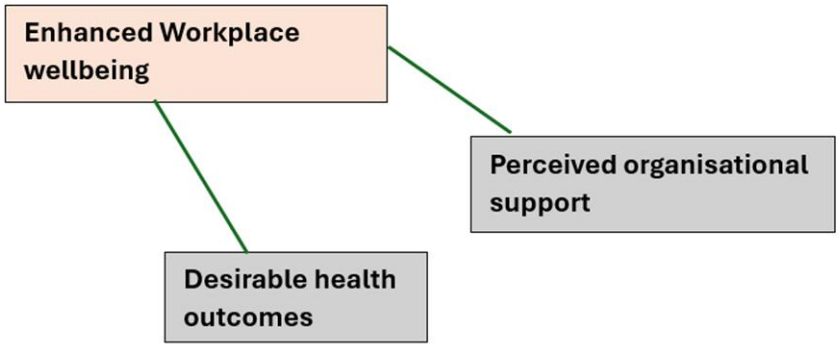

Figure 10 Main theme – Enhanced workplace well-being

Thematic analysis generated the third main theme - enhancement of workplace well-being. Employers and employees perceived that the organization had a role in enhancing a conducive health and well-being environment in the workplace.

> "*Organisation to ensure it is able to maintain a safe and healthy environment"* (Olivia-EME).

Providing resources like gym equipment contributed to enhanced interest in physical fitness activities.

> "*Maybe there could be gym equipment in the space* (Lisa-EME).

For some employers and employees, the perception of a healthy working environment was linked to desirable outcomes of well-being, such as enhanced productivity, low sickness absence levels, and improved employee relationships. From the main theme - enhancement of

workplace well-being, two subthemes were generated: a) Perceived organizational support and b) Desirable well-being outcomes.

Sub-theme - Perceived organisational support.

Analysis showed that employers perceive health and well-being in the workplace as important but have different ways in which they implement them. For example, some employers provide health insurance coverage so their employees can access health care. However, they have also worked in partnership with insurance companies to provide preventive services like annual health check-ups and annual health talks. According to Katie, an employer, this measure has worked to enhance health and well-being in the workplace because these approaches have been sustainable.

> *"What we have sustained over the years, and I think that helps somewhat, is what we do for them on health days where you have your tests done on somebody. It's actually we partner with the medical insurance" (Katie-EMR)*

However, another employer, Zack, cautions that there is a need to ensure that the insurance company is not just doing check-ups and talks for commercial purposes but is genuinely interested in the prevention of disease.

> *"I think it's a good idea as long as it's not actually for preventive purposes to ensure that developing, I mean to ensure that people don't get to a level where they are getting sick... especially when you are dealing with companies that are in for profits, insurance companies may not be really the right partners for that because in any case they make money out of their unwellness (Laughs) so you can question whether their objectives are genuine or is purely about building business. So, if the partner is non-profit and they are engaging the people or the member of the company in activities that are for the benefit of the members, then it is a very good idea" (Zack-EMR)*

One employee gave the example of how the organisation can support employees through sponsored or non-sponsored programmes to facilitate employees engaging in keeping fit, as well as regular health check-ups to gauge the progress of individual employee health.

> *"By like now, a programme in place for the employees, like maybe if we had some space here, get someone to be like every day at 5:00 p.m. I always exercise, and guys can register to come, so sponsoring such activities or having them even if it's not within the organization, maybe there is a day, maybe Saturday when employees can meet somewhere, and we can also get some of the employees who can go to karura in Saturday morning or for a run yes. And then having them, they can also do like targets for personal health like for example having someone come do checkups for everybody, and then you get your records like full records for employees, and then after a duration of time they can come again and do the measurements, and then they will see who has improved maybe that person" (Amelia-EME)*

The analysis also showed that not all employers provide health insurance and annual check-ups. Some employees have never had a health check-up and do not have health insurance offered by their employer. Millie talks about this in the following excerpt:

> *"Like me, since I came here in August 2016, I have never heard them saying that they have free medical examinations, and I am here working as a housekeeper and have never heard them telling me to come, we have free examinations, we are doing this. No, I just passed through there knowing that this is a big organization, but I have no information. I am just there" (Millie-EME)*

Others talked about having health club facilities open to them at a subsidised fee. This is where the employer pays part of the health club fee to encourage employees to engage in keeping fit in the gym.

"We have a welfare group. So, as a company, we do negotiate with these health clubs. For example, we have Utalii and Barclays, so the company pays part of the money and interested employees can now pay a smaller subscription after work go there and then also all these marathons chartered, we do participate" (Oscar -EME).

Analysis showed that although the organisation made efforts to provide access to health clubs, the arrangement was not sustainable for some employees, and they stopped using the health clubs. The cost, though subsidised, still proved to be high for employees.

"The initial uptake was quite high, but it didn't sustain in that at the end of that maybe one per cent, so that did not go on for so long" (Katie-EMR)

Zara, an employer, talked about the cost of gyms, which was a barrier to participation in physical fitness activities, and noted that it would be preferable for employers to provide gym facilities that offered affordable payment options. Zara expressed her views regarding gym offers in the following excerpt:

"Yeah, because the only thing that can make them not to enrol when it comes to money. You know, Kenyans nowadays they are like… they are very questionable when it comes to money unless it is favourable. There are those things that you can say at least an amount that the common citizen can afford. The organization is the one to do the research, which is the best people to deal with. If there is a certain fee, they can be like if you join the group and instead of me paying, they are deducted from my pay so that it can be easy" (Zara-EMR)

Although some employees were happy with the amenities provided, like the health clubs, they felt that challenges arose because of their location and the time required to access them. They would prefer if such amenities were provided in the office building to improve use and access.

"If the resources were availed nearer to you, then if you know you are leaving work at five, you can decide to do thirty minutes before you go home because you know there is even if there is traffic or jam whatever in Nairobi or that at least you can even do that and go home but if you say you leave here to go home first and then you go" (Lisa- EME)

Providing employees with information about health and well-being was viewed as a role played by the employer. This was done through partnering with experts to give health talks about the prevention of chronic disease and living a healthy lifestyle, done annually as a health day. During the health day, they also provide vaccinations for communicable diseases like hepatitis and flu.

"We normally organize health talks, and we call up our partners. We are covered by Jubilee Insurance, so twice we have called them, and we have talked for a whole day. Do you know what I mean? Yeah, so they talk about weight, BMI, we are tested diet, such. So, they come, we weigh, we run, do testing, and so on. We call it a health's day, and then on top of that, we did these vaccinations" (Oscar -EME)

Other employees, like Lisa, were happy with the role their employer was providing, especially in providing health-related information.

If we are talking about awareness, I think the company does that because there are people who even come and talk to us. Some people come and test our BMI and our body fat, so like every year, you already know where you are. So, in terms of awareness, I think the company has done its work" (Lisa-EME)

Some employees perceived that the employer should provide social amenities to enhance health and well-being. For example, giving employees time for tea breaks and providing healthy meals for lunch is the role of their employer. This would improve their dietary

lifestyle at work. Others felt that offering catering services within the building would reduce the chances of employees going out there to buy unhealthy foods.

> *"So if they had this thing and they say if they have these people who work for them and they try at least even if it is not every day but at least in a week even if it is three times they provide with a cup of tea, lunch at least something to show people that today we provided a cup of tea and lunch we provided rice with beans and then that way on Wednesday maybe ugali with kales at least people can eat healthy. So there, it depends, but now there is every organisation talking about cost. So, it is very difficult" (Millie-EME)*

In addition, Lisa perceived those catering services had a bearing on healthy eating behaviours and was concerned that this was not the current situation in her workplace, as seen in the following excerpt:

> *"You probably have to eat junk, or you get food there is another caterer who brings, but maybe we don't like their food so yeah maybe you improve on catering services that we get maybe think of something" (Lisa-EME)*

Thematic analysis depicted some employees' perception of the role of the employer as one that is supportive in providing resources to enhance health and well-being through enabling access to health services in hospitals. For instance, some employees, like Olivia, perceived that the employer has a role, especially in providing means to access healthcare through employer-supported health insurance, which gives an employee less worry about meeting healthcare costs, which are quite a problem in Kenya. Her comments are as follows in the excerpt below:

> *I think it's important because you need to know where you will go when you are not feeling well. It should be at the click of a button, like, for example for myself, when I*

get sick, I go to Aga Khan Hospital, and I know when I go there, I don't have to worry about money because I am paying through the insurance that my employer has provided me. So, I think it gives you peace of mind to just know that you are insured because, I mean, nobody plans to get sick; yeah, so it just gives you that assurance that whenever it happens, you can access the hospital, and you are able to get paid for it. (Olivia-EME).

Oscar, an employee, talked about how their organisation has put in place measures to ensure the safety of workers as part of OSHA regulatory requirements for employers.

I think it's important because you need to know when you are not feeling well, you need to know where you will go. Like, it should be at the click of a button like for example for myself when I get sick, I go to Aga Khan Hospital and I know when I go there, I don't have to worry about money because I am paying through the insurance that my employer has provided me. So, I think it gives you peace of mind to just know that you are insured because I mean nobody plans to get sick yeah, so it just gives you that assurance that whenever it happens you can access the hospital and you are able to get paid for it. (Olivia-EME).

Similarly, Morgan, an employee, talked about the importance of an organisation providing the means to access health insurance to pay for health services, as evidenced in the following excerpt:

"*Another view is that if you can insist on the company after that collaboration, at least every employee should have medical coverage. If it is emphasized that at least each and every person has it, it can really help" (Morgan EME).*

Dave, an employer, summed up his views on the role of organisation as follows:

"Organization to ensure it is able to maintain a safe and healthy environment. Also, that is to facilitate those regular medical talks on or medical examinations just to ensure that the workforce is healthy" (Dave-EMR)

The thematic analysis also highlighted that employees feel employers have a role to play in enhancing mental and social health and not just focusing on other activities like gyms and health check-ups. For example, Zack, an employer, views social interaction as important for employees so they know what is going on and have the opportunity to release tension.

"The other would be a time. Time is also something that the company can think about in order to socialize. I know the company is that some of our customers that on a Friday afternoon, people leave work early just to catch up you know on our social aspect and what is happening in their community around, have a drink and enjoy themselves" (Zack-EMR)

Oscar, an employee, commented about employees and the value social interaction has on their well-being in the following excerpt:

Yes, we do, in fact- you know, when people are just in the offices, let's say we are going out socialising, they will really make an impact. In fact, there was a time we were allowed to bring in a family and register in the gym, and it was such a wonderful thing, a great motivation (Oscar-EME)

For Olivia, the organisation takes them for team building activities, and this has an impact on employee mental well-being:

"*Team building helps people come together, and like you just let your hair down, you get out of the norm, you know just have the corporate way of doing things, and you just let your hair down and get to interact freely in a social way without necessarily having to like asking for each other what a transaction work related like you put a*

side work-related and you interact freely you laugh, and at the end of the day even the people you don't relate very well you will for sure meet them like in an activity you meet them and you don't have a choice but to relate with them. It helps because, like, it breaks that ice so that, like, when you now come back on Monday, like, for example, if the team building was mostly it happens on Friday, so when you come back on Monday, your mind is relaxed like you broke that ice of like there was tension so it's broken and you start afresh and I think there is nothing good as working when you know you have peace with everyone" (Olivia-EME)

Similarly, Albert, an employer, perceived that creating an enabling environment for employers to air their concerns was important, as evidenced by his comments in the excerpt below:

"Having several integrated meetings in each and every department getting to share a lot because sharing is also very important because it kind of releases tension and it creates an awareness that probably one may be thinking that due to delay of salaries or something close to that where it is only one party suffering then later, I came to realize it is a common problem everywhere with actually release is the fears that probably accompanies well-being or something like that" (Albert-EMR)

The other role that employees felt organisations should be responsible for is ensuring safety and a healthy built environment. Olivia, an employee, and Oscar, an employee, talked about the importance of employees having a safe space to work in that minimises the risk of accidents and injury in the following excerpts:

"Yeah, that means a place where you have access to… like there is enough space, there is enough lighting, there is oxygen circulating freely, and you have access to clean water for drinking and sanitation that's toilet and ergonomics like you have comfortable desk and seats because it is where you spent most of your time and

basically the environment is free from things that might cause accidents those are I mean the stairways is clear the electricity sockets are, everything is well taken care of "(Olivia-EME).

"Okay, what I can say first of all, its mandatory, and one of the obligations of an employment act is to provide safety and probably to promote the health and safety of the workers or the employees by providing an environment that they can perform their duties yes so we are aligned to that and we have a safety committee in place as required by the law we have our meetings, inspections, everything you can see around side images, fire detectors, fire exhibits, first aid box, first aid gloves, yes as displayed in our notice board. Yeah" (Oscar-EME)

Although the organisation has a role in ensuring safety and minimising work-related illnesses, employers mention that the employee also has a role in ensuring they adhere to safety regulations to minimise work-related health risks was mentioned by Adrian and Brian as follows:

"Of course, precise that is now trying to live within the safety procedures of the workplace and within are those procedures that are to ensure that in the event of anything like, for example, if you are infected of an airborne disease as an example, there are those workplaces where you are supposed some restrictions until when maybe you are treated then you can be allowed to come to work. All the other areas that could mean now is now when we talk about self-care, we need now to be able to understand yourself the environment you live in" (Adrian-EMR).

"The organisation has its own rules in terms of health and safety, so when you are within the workplace, the moment you follow those regulations, then you won't have an issue, and at the end of the day, the company is going to benefit, you as an individual you are going to benefit because, I will take an example where the

*employer tells you to have personal protective equipment for example, the gloves when you are going to wash a toilet. In as much as they have that role to ensure that they have given you that particular PPE, in short, you also have a role, a duty to ensure your own safety" (*Brian-EMR*).*

Summary of subtheme - perceived organisational support

The subtheme- perceived organisational support, discussed employers' and employees' perceptions of current organisational support for health and well-being. Employees also gave their views regarding their expectations of support for health and well-being. The next section is about evidence regarding desirable outcomes that enhance health and well-being in the workplace.

Zack's sentiments come from the current situation in Kenya's health insurance market. Kenyans pay for healthcare services through health insurance. However, health insurance coverage remains low, with only 19% of Kenyans being insured through government subsidies (Munge, 2018). Health insurance is provided by the National Health Insurance Fund (NHIF), which is a government-subsidised scheme or by private providers (Muthaka, 2020). NHIF is the main insurer, covering 19% of Kenyans, while private health insurers cover about 1% of the population, most of whom depend on their employers to fund them.

There is, therefore, stiff competition to get organisations to partner with private insurance companies, which leads to marketers giving incentives like free immunisations or medical check-ups to entice employers to register as customers. The medical check-ups are therefore seen as not being part of a preventive programme but one-off campaigns to increase customers.

Sub-theme: Desirable well-being outcomes

Thematic analysis in this sub-theme revealed that there were expected desirable outcomes that impacted workplace well-being. Productivity, for example, was also critical in maintaining healthy relationships and motivating colleagues. Employees discussed concerns about absenteeism and sickness absence, where they had to take up assignments for their sick colleagues. This has an impact on workers' health and may impact health and well-being in the workplace, with issues such as burnout commonly identified by the employees.

> *"Here is also the risk of burnout in terms of if someone actually allocated. Mostly, when we have two personnel allocated for a certain task, one does not appear, and then the other one will work twice as hard. You will not be paid the other person's salary just because you were one and you were supposed to be two. This will affect and also demoralise the other person, creating some kind of friction if it continues that way and then this other person has a deviant behaviour of always causing to fall sick the other person will feel like short-changed... yes Yeah" (Albert-EME)*

In response to what being healthy means to employers and employees, some of them equated a healthy person to one who is able to work or is productive. For instance, Oscar, an employee, mentioned that:

> *"Obviously, we need to increase our productivity, and when you have a healthy staff, everything will see that people are working in the right way. You concentrate on work we will increase our products and services for customers we serve them better" (Oscar_EME_12)*

Physical fitness and not being sick, for instance, were identified as beneficial to work output or as a measure of productivity. The following employee excerpts explained it as:

"Being able to execute your daily activities and duties and being physically fit" (Amelia-EME)

"So, it's just to ensure that though those staff at the end of the day that they are able to be productive within their workplaces." (Brian_EMR)

"Okay, when I say somebody is healthy because you can see him/her when she is working. When somebody is sick, you can know this person is sick is not able to work, you will approach him/her how is feeling so that you can allow her/him to go to the hospital" (Nelly- EME)

The above comments represent a group of workers whose job involved physical hands-on work. This reveals why their being sick or physically unfit meant that the capacity to do duties was diminished and impacted the team who had to take up extra roles.

Employers also discussed the impact of sickness absence and sickness presenteeism. The inability to effectively work while on duty due to illness was perceived as a problem for the organization's performance. Productivity was mentioned as key to meeting customers' needs and keeping the organization profitable. Adrian, an employer, expressed it as follows:

"If you have a workforce that is not healthy, you expect the results to be affected. You are not able to satisfy your customers because you don't have the time to go meet the customer's needs. You are very busy in trying to chase doctors and looking for medicine, so it will have a very big impact on any business whether it is a profit or non-profit making it will have an impact" (Adrian-EMR)

Promoting health in the workplace positively impacts productivity because healthy people are able to complete tasks on time and save on company costs. If workers report to work when they are not well, they take more time to complete tasks, and this increases operational costs for the company. These sentiments were summarised by Albert, an employer, as follows:

"Productivity impacts because, let me just take this, I am supposed to perform a certain duty in a specified time, and you see, I am not really that well. It will require a longer time to finish a certain task, and that also will be a cost to the company because you are probably going to pay something over time. But if you promote health, let's say if somebody is really in good shape, tasks will be completed in the usual time and the usual time and also you will save cost" (Albert-EMR)

Oscar had similar sentiments and talked about the impact that an employee who is not productive has on organisational costs.

"Productivity impacts because, let me just take this, I am supposed to perform a certain duty in a specified time, and you see, I am not really that well, it will require a longer time to finish a certain task, and that also will be a cost to the company because probably you are going to pay something over-time. However, if you promote health, let's say, if somebody is really in good shape, tasks will be completed in the usual time and the usual time and also you will save cost. They will impact the productivity of the organisation or slow down individually or collectively because you will get like somebody will have what we call procrastination, postponing things and all in all things will not do well or work" (Oscar-EME)

Dave, an employer, added that there could be persons who work while they are unwell, but their performance is not good enough, and the organisation will still remunerate the workers, regardless of whether they have met their performance indicators. He explains the impact in the following excerpt.

"There could be incidences where maybe you could be unhealthy, but you are still performing, and you see now you are being stretched beyond what the body can sustain. So, you realize there could be those incidences, and on the other end, there

are issues to do with the fact that you are not able to perform against your KPIs, for example. So, you find the impact could be now there is a lot of money lost, and at the end of the day, the company incurs costs to ensure that it remunerates you, but at the end of the day, there are no tangible results of what is done" (Adrian-EMR).

Similarly, Albert viewed that a healthy workforce translates to lower costs of labour as there is reduced replacement of sick workers and explained this as follows:

"Definitely, to get better results in any task that you are doing, you require at least personnel operating or people who are actually working would be of health or could well be and also in good health so because if they are ill, the obvious there is the opposite. You expect to have a lot of downtime in terms of completing tasks. There will be a lot of turnover over people missing, so that's a cost towards the company because they keep replacing people, and then you also keep incurring costs in trying to bridge the gaps mostly with our service industry it's going for our people. That are actually in good health because it has a direct effect. Because one of the major components of our cost is labour, so that is something that is actually taken up seriously" (Albert-EMR)

However, Zack, an employer, believes that being healthy at work is when one is able to handle assignments without negatively impacting one's physical and mental status. For him, mental health impacts productivity, and he emphasizes the importance of creating an environment where people are happy with their work.

"Of course, productivity will go down if you have many people suffering from these issues. For me, I consider people happier at work because of what they do. It would be very important. So, if there are issues to do with depression and all that makes people not happy and now there is no passion for work- guys will just do it for the money and purely not for personal satisfaction" (Zack-EMR).

There was also the concern that productivity imbalance puts employees at risk of burnout. Absenteeism can result in some employees being overworked to cover for the slow members of the team. This creates an imbalance in workload and seems unfair to employees, which can be demoralizing or result in burnout. Albert, EMR, puts it this way:

> *"There is also the risk of burnout in terms of if someone actually allocated like mostly when we have two personnel's allocated for a certain task then one does not appear then it means the other one will work twice as hard so there is toil in terms of how that other person will actually be would feel and also actually feel fragilized in terms of you will not be paid the other person's salary just because that you were one and you were supposed to be two will actually as an effect and also demoralizing the other person also creating some kind of friction if it continues that way and then this other person has a deviant behaviour of always causing to fall sick the other person will feel like short changed yes, and that would cost to be prepared with someone else. Yeah" (Albert_EMR)*

Summary of main theme three (3) -Enhancing workplace well-being

The organisational perspective regarding health and well-being is centred not only on safety and prevention of work injuries but on other workplace determinants like availability of wellness resources, cost of wellness and time, productivity, sickness absence indicators and absenteeism and presenteeism. These determinants of workplace health and well-being, as represented in the conceptual model Figure11, were at the core of the conversations between employers and employees and formed the components that are suitable for the implementation of health and well-being interventions in the workplace context.

Employers and employees' perceptions of productivity at work revolved around health and illness. There is the use of terms like 'if you are sick, you cannot work' and 'burnout'; it will be a cost to the company – which suggests that being unwell as an employee amounts to risk

for the organisation or fellow employees. Employers mention that this risk is lower if workers are healthy. It seems that productivity is more critical than the general well-being of workers. Such perceptions could be exploited to influence employers to take more interest in enhancing workers' health and well-being.

All of these address complex interactions between individuals and work environments its impacts on workplace health and well-being but have to be balanced with organisational profitability and progress (McLellan, 2017). When leaders perceive their organisation to be committed to health and well-being, they are likely to unconsciously adjust their perception of health and well-being and be more sensitive toward health issues. Organisational health mindset and health-promoting leadership behaviour can impact employee well-being (Kaluza et al., 2020; Zweber et al., 2016)

Summary of all the main themes

The findings of this study are a representation of employers' and employees' voices regarding their perceptions of health and well-being in the workplace. The three main themes of the findings were the meaning of health and well-being, health and well-being influences, and enhanced workplace well-being. Constructions of health and well-being are centred around dietary lifestyle, being free from disease and maintaining physical activity and exercise. The perception of healthy or unhealthy eating was strong. Healthy eating was viewed as maintaining traditional diets, and unhealthy eating was perceived as eating modern processed foods. There was overall knowledge about nutrition among employers and employees, and a healthy dietary lifestyle was assumed to be an important factor in the prevention of disease. Health and well-being were also perceived as being free from disease. The employers and employees mentioned NCDs as the most common threat to their health and well-being and described them as lifestyle diseases. Being physically active was perceived as important in maintaining good health and productivity and preventing disease. Activity and exercise were

seen as personal motivation but also required peer and organisational support for the maintenance of a healthy lifestyle.

Being free from disease, maintaining a healthy dietary lifestyle and being physically active were perceived to be achievable through collective engagement with employers and employees' daily interactions. Employers and employees appreciated the role played by their peers in engaging in group activities like going to the gym or eating a healthy meal. Influences from role models and health information from fellow employees were understood to influence health behaviours and perception of workplace health and well-being. Social interactions in the workplace generated health information and norms of health and well-being.

Employers and employees also perceived that ensuring enhanced health and well-being in the workplace went beyond health and safety activities and involved other workplace determinants of health. The impact of employees' health behaviour and absenteeism related to illness, low productivity, and its impact on employees was discussed, as well as the impact this has on general productivity, profitability, and health behaviours in the workplace. Employees and employers perceive the organisation as having a role in enhancing well-being through the provision of resources like access to health breaks and health insurance coverage, among others. Employers showed overall commitment to enhancing health and well-being in the workplace. As shown in the conceptual model Figure 11, organisational determinants of health and well-being are interconnected with aspects of interpersonal interactions and how this influences individual behaviour. The conceptual models also show the multicomplex dynamism that exists among employers and employees as individuals, as well as interpersonal influences that impact organisational worksite health and well-being enhancement.

Conclusion

This chapter presented findings regarding the perception of health and well-being in the workplace. A qualitative study where three main themes were generated through thematic analysis. The findings of this study showed that perception of health and wellbeing concepts are multifaceted and contextualised. In response to the objective regarding concepts of health and wellbeing in the workplace, employers and employees perceived the meaning of health and wellbeing in terms of being free from disease; being physically active and having a healthy dietary lifestyle.

Concerning the objective about perceptions of influences in the workplace, Employers and employees talked about their perceptions of health and well-being influences in the workplace that kept them engaged in behaviours that enhanced their health and well-being. Peers were perceived to be important in being role models for inculcating a healthy lifestyle culture in the workplace and relaying health information that influenced workers' perceptions towards participating in health. This chapter presented findings regarding the perception of health and well-being in the workplace. A qualitative study where three main themes were generated through thematic analysis. The findings of this study showed that perception of health and wellbeing concepts are multifaceted and contextualised.

In response to the objective regarding concepts of health and wellbeing in the workplace, Employers and employees perceived the meaning of health and wellbeing in terms of being free from disease; being physically active and having a healthy dietary lifestyle. Concerning the objective about perceptions of influences in the workplace, Employers and employees talked about their perceptions of health and wellbeing influences in the workplace that kept them engaged in behaviours that enhanced their health and wellbeing. Peers were perceived to be important in being role models for inculcating a healthy lifestyle culture in the

workplace and relaying health information that influenced workers' perceptions towards participating in health-related activities in the workplace.

The objective regarding the impact the organisation can have on workplace health and well-being, the role of the organisation was perceived to be that of providing resources that helped workers improve their health like financing access to healthcare services, providing workplace facilities like gyms and catering services to create an enabling environment for workplace wellbeing. Desirable outcomes like low sickness absence rates, productivity, and employee engagement in mental health support, were perceived to contribute to enhancing well-being at work.

The objective regarding the impact the organisation can have on workplace health and well-being, the role of the organisation was perceived to be that of providing resources that helped workers improve their health like financing access to healthcare services, providing workplace facilities like gyms and catering services to create an enabling environment for workplace wellbeing. Desirable outcomes like low sickness absence rates, productivity, and employee engagement in mental health support, were perceived to contribute to enhancing well-being at work.

The next chapter will discuss the analysis and implications of findings that are in line with the objectives of this study.

CHAPTER FIVE

DISCUSSION

Introduction

This chapter discusses the major findings of this study, which were presented in chapter four. Interpretation of findings is done to show how they align with current literature and how the findings address the objectives of this study. The presentation of a workplace health and well-being concept model summarises the discussion.

The purpose of this study was to understand the perception of health and well-being in the workplace. The literature review showed that there was limited information and research done in Kenya regarding workplace health and well-being, and even fewer studies were done regarding health promotion and prevention of NCDs utilising a more suitable population group like those in the workplace who can be easily accessed. This being an exploratory study, a qualitative descriptive methodology was utilised to accurately capture the perceptions of employers and employees about health and well-being in the workplace context.

According to Polit &Beck (2018), the qualitative descriptive approach is commonly used in nursing and other health studies, especially where there is little information and a phenomenon is poorly understood. The qualitative descriptive design allowed the gaining of new insight regarding workplace health and well-being in the Kenyan context, as this area of research is lacking, and there is little information currently known about it. This design allows the generation of new information where little information exists about a phenomenon, such as in the case of this study (Kim et al., 2017).

The qualitative descriptive approach also allowed data to evolve in an inductive process, which allowed the researcher to stay close to employers' and employees' voices. Employers and employees were able to contribute to the development of new knowledge and

understanding of the broader context of health and well-being in the workplace (Doyle et al., 2020). Semi-structured interviews were conducted to elicit constructions of health and well-being and obtain rich, detailed information about health and well-being in the workplace. Thematic analysis was utilised to analyse the data, and this is a method of describing and interpreting data through a process of selecting codes and generating themes (Braun & Clark, 2006; Kiger & Varpio, 2020). Thematic analysis was applied through six steps, which included familiarisation with the data, generating initial codes, generating initial themes, reviewing themes, defining and naming themes, and reporting the findings.

. To demonstrate and ensure the rigour and trustworthiness of the study, all aspects of data analysis were documented to show how each step of interaction with data was done. Actual quotes from the transcripts were used to report findings (Cypress, 2017; Johnson 2020). An audit trail for the study was ensured by providing an accurate step-by-step description of the data analysis process, ensuring all documents like interview transcripts, interview notes and audio recordings, were available for confirmation. Prolonged engagement with the data through back-and-forth reading and re-reading of transcripts was undertaken to learn or understand the context of the employer and employee perceptions in-depth and minimise distortions in the inductive process. Being reflexive throughout the data analysis process enabled me to maintain self-awareness of my role both as a nurse and as an employee of an organisation to keep true to the employers' and employees' voices and keep guard over or identify biases that may have interfered with my interpretation of the data (Johnson, 2020).

Three main themes were generated through thematic analysis, namely a) Meaning of health and well-being, b) Health and well-being influences and c) Enhanced workplace well-being. This chapter includes a discussion of the major findings of this study presented in chapter four and aligns findings with current literature to address the objectives of this study. The

discussion is summarised by the presentation of a workplace health and well-being concept model (see Figure 11).

Interpretation of the Findings

Objective one: To explore employers' and employees' perceptions of health and well-being concepts.

Health and well-being research often discusses the meaning of health and well-being as created by specialists from health professions or patients who have medical conditions. However, it is necessary to understand how meanings of health and well-being are constructed among lay persons in non-medical spheres such as the workplace. Employers' and employees' perception of health and well-being was about how they understood and interpreted these concepts in the context of their work world, health and well-being lifestyle and interactions with others at work. Perceptions of health and well-being were constructed with the understanding that one is either healthy or unhealthy because of their behaviour or because of influences in the environment they work in. Lay conceptualisation of health and well-being suggests that people interpret constructs of health and well-being within their environment, knowledge, personal values or beliefs and day-to-day experiences with their life worlds (Huang et al., 2022; Mc Mahan et al., 2013; Joshanloo, 2019).

In this study, employers' and employees' perceptions of health and well-being focused on dietary lifestyle, being free from disease, and being physically active as important. Although most research on the conceptualisation of health and well-being has been done in the Western world, there are similarities in this study, such as the study done by Hone et al. (2015). Their study showed that adults conceptualise well-being as having good physical health, being active and eating healthily as an example of well-being. Similar to this study, qualitative enquiry about perceptions of adults in European countries regarding concepts of health showed that employers and employees regarded health as eating right, exercising and

socialising (Downey et al., 2013). However, in contrast with this study, Jarden et al. (2018) asked intensive care nurses in a quantitative study to identify elements of well-being. The nurses identified work-life balance, workload, physical health and feeling valued as characteristics of well-being. These findings of this study concur with previous research that shows that perceptions of health and well-being are multifaceted, contextual, and diverse - this has implications for health and well-being enhancement or intervention (Bharara et al., 2019; Jarden et al., 2019), especially in the Kenyan context.

Perceived healthy or unhealthy diet

Lifestyle changes may be difficult to sustain when they are initiated externally as opposed to being derived from one's own understanding and interpretation in prioritising behaviour change. A healthy dietary lifestyle was perceived to be important in maintaining overall health. Employers and employees perceived healthy dietary lifestyles in terms of good or bad food. Findings show that employers' and employees' perception of healthy dietary lifestyle was determined by intrapersonal factors such as their beliefs, attitudes, and culture regarding healthy ‘good food’ or unhealthy ‘bad food’ to determine dietary behaviour. For example, the construction of healthy eating for some employers and employees was determined by traditional norms about food choices and preparation within the culture in which they have been raised (Osei-Kwasi et al., 2020). As a result, people represent cultural or traditional food choices as the appropriate knowledge of good food rather than scientific knowledge. These findings suggest that people represent cultural or traditional food choices as the appropriate knowledge of good food rather than scientific knowledge. These perspectives are in keeping with the qualitative study done by Bisogni et al. (2012), which sought to understand people’s interpretation of healthy eating. Bisogni et al. found that employers and employees described healthy eating within their contextual environment, life stages, and experiences. The findings

in this study concur with a study by Gasper et al. 2020, which concluded that discourses around healthy dietary lifestyles are constructed within social and cultural dimensions.

Findings revealed that employers and employees viewed healthy eating practices as a means to avoid illness. Diseases such as cancer and cardiovascular diseases were assumed to be caused by eating unhealthy diets. Indeed, studies done on SSA have shown that unhealthy diets are on the rise in SSA and are resulting in obesity, which is a risk factor for cardiovascular disease (Holmes et al., 2018; Steyn et al., 2014; Bromage et al., 2021).

Employers and employees indicate that environmental factors influence dietary lifestyle choices. Food availability was a concern because though they were knowledgeable about healthy diets, access to healthy foods at the workplace was inadequate. This was compounded by the proliferation of processed foods in the eating places and the high cost of healthy foods. According to Lima et al. (2021), meals eaten in the workplace represent a large contribution to a person's dietary intake and healthy behaviour. This finding is supported by a qualitative study done by Phiri et al. (2014) among nursing staff in South Africa, which showed that lack of healthy food in the workplace impacted their food choices, leading to risk of obesity and incidence of NCDs. A systematic review done by Nichols et al., 2017 showed that workplaces often create barriers to employees' healthy eating behaviours. Modifying external factors like offering time for a break or subsidising the cost of healthy foods can promote healthy eating among employees.

Nutrition transition was identified as a factor that influenced dietary lifestyle among employees (Peters et al., 2019). The proliferation of obesogenic diets sold in fast food outlets contributed to changes in dietary habits. This finding is supported by Popkin et al., 2022, who opines that key drivers of nutrition transition are urbanisation and increased income growth. The increased number of women in formal employment means that more time is spent at

work than at home. To save time, employees prefer processed food, which is convenient and easy to prepare. This is supported by Peters et al., 2019 whose study showed that nutrition transition and rise in NCD risk are seen in rural-urban migrants in Kenya.

Being free from disease

The meaning of health and well-being was also perceived as being free from disease. Employers and employees used biomedical definitions to define health as being free from disease or not being sick. Others defined it as having nothing disturbing your body, possibly to denote holistic health. Employers and employees seemed to avoid poor health outcomes rather than achieving good health. None of the employers and employees discussed their own personal risk or health status in general. Previous research has shown a low self-perceived risk for chronic diseases like diabetes and hypertension among African populations (Guariguata et al., 2015; Mayega et al., 2014). Self-perceived risk can be enhanced through health promotion and has been shown to affect health-seeking behaviour and behaviour change (Loprinzi, 2015).

It was interesting to note that employees' desire to be free from disease was in regard to major diseases like cancer, cardiovascular diseases, mental health problems and not necessarily minor ailments like the common cold. However, their concerns about major chronic diseases may have been due to the current rise in NCD incidence, which is on the rise and impacting households across the country. Additionally, employers and employees did not speak about their personal disease journey or interaction with the healthcare system except about the financial burden of disease, which is a challenge.

Awareness of the risks of NCDs was present, with some employers and employees talking about lifestyle disease and obesity as issues they felt needed to be addressed to enhance good health. This finding is supported by Mkuu et al. (2021), whose study found that almost a third

of Kenya adults are overweight and noted the associated risk of NCDs. Awareness of Obesity as a risk for disease by employers and employees was contrary to a common cultural belief in Africa, where obesity is viewed as being healthy or as a sign of wealth and prestige (Agbeko et al., 2013). For example, a study done by Boateng et al. (2017) showed low knowledge and perception risk regarding obesity and CVDs. The study emphasised the importance of appraising beliefs and attitudes to guide behavioural change (2017). However, the belief that obesity is desirable is changing among working urbanised persons who view obesity as the risk for CVDs. As supported by other studies (Appiah, 2014; Okop, 2016), poor risk perception of obesity in Africa would affect the intention to change behaviour and is likely the cause of existing undiagnosed cardiovascular diseases and other NCDs.

Employers and employees seemed to have high expectations of employers financing their healthcare costs. The financial implications of managing chronic disease may, therefore, lead to the desire to be free from disease. Having financial support means reduced stress related to taking care of family health needs and gaining access to quality healthcare. According to Mwenda et al. (2021), household spending on healthcare is high and often eats into family savings and income. The desire to remain disease-free has a far-reaching impact on overall employee health and well-being. Healthcare costs mainly occur in primary health facilities and account for 64% of personal healthcare expenses. This is termed as catastrophic health expenditure because of the impact of pushing households into poverty (Barasa et al., 2017; Masiye et al., 2016; Laokri et al., 2013).

Being physically active

Being physically active was perceived as an important health and well-being construct. Being physically active was viewed as a sign of general good health and productivity by both employees and employers. However, literature shows that occupational sedentary behaviour is on the rise (Van Dommelen et al., 2016). A sedentary lifestyle is on the increase in SSA and

a major risk for NCDs. However, the extent among working populations has not been studied extensively. These findings are supported by Motuma et al. (2021), whose study in Eastern Ethiopia showed that one-fifth of working adults had high sedentary behaviour. Sedentary work has been found to be associated with poor health and mortality, yet a large proportion of workers are exposed to low-activity work, increasing risk (Parry & Stracker, 2013; Crichton & Alkerwi, 2014).

The benefits of being physically active were perceived to be the prevention of diseases like diabetes and hypertension, which were caused by a sedentary lifestyle. This perception is supported by a longitudinal study by Stamatakis et al. (2019), which concluded that a sedentary lifestyle was associated with CVD mortality among least physically active adults, but moderate to vigorous activity effectively eliminated such association. Similarly, studies by Ekelund et al. (2016), Van De Zende et al. (2022), and Biddle et al., 2016 reiterate that a sedentary lifestyle at work is a risk for NCDs.

Some employers and employees felt that although they were aware of the ill-health consequences of a sedentary lifestyle, their jobs were desk-based, hence the need for protected time to exercise. Other studies have shown that the mortality risk of a sedentary lifestyle can be changed by increased physical activity. Employers and employees in light activity are thought to improve cardiovascular health. Health promotion interventions that encourage intervals of light-intensity activity can be useful. A systematic review done by Chu et al. (2016) examined the effectiveness of workplace intervention targeting the reduction of sitting at work. The study found consistent evidence in the reduction of workplace siting, with multicomponent intervention being the most effective.

Lack of time was also perceived as a barrier to improving physical activity, according to some employers and employees. Work-life balance issues left little time to engage in

activities that enhance activity. Protected time was viewed as important in allowing employees to take time out to engage in exercise. However, Ryde et al. (2020) suggest that protected time or paid worktime has its challenges if there is no existing culture of enhanced activity, but where this exists, paid time can have numerous benefits. A work environment that is conducive to exercising is necessary to encourage employees to be active. These perspectives are supported by Forberger et al. (2022), whose study supports the utilisation of nudges to prompt employees to engage in physical activity like climbing stairs, standing for short periods and other low-intensity exercises to enhance activity. According to Thomas et al. (2021), employers who prioritise time for employees to engage in exercise activities elicit behaviour change, while employees who do not have time are likely to value activity and exercise less.

Employers and employees felt that enhancing physical activity was a personal responsibility. They identified moments for improving one's activity, like walking to work instead of using public transport or working out in the gym. Including employers and employees in the physical activity discourse is said to be important in gauging acceptability and potential future workplace programme actions (De Cocker et al., 2015).

According to Cole et al. (2015), employee perception concerning the physical work environment and personal factors need to be considered in designing appropriate interventions to counter a sedentary lifestyle. Further, the reduction of sedentary behaviour needs to consider individual and work-related factors, as well as issues like age, and social and cultural influences. That way, behaviour change can be integrated into employees' daily lives. (Rawlings 2019). There is also evidence that physical activity reduces employee absenteeism in healthcare costs and improves employee performance at work (lier et al., 2019; Mattke et al., 2014).

The findings in this study shed light on perceptions regarding health and well-being in the Kenya workplace. Employers' and employees' responses were person-centred on the persons' views, beliefs, feelings or experiences of health and well-being in general. Health and well-being constructs are multifaceted, and employers and employees discuss health and well-being in an interconnected manner, not as separate concepts. The term health seemed to be constructed as an overarching concept representing all matters regarding health and well-being. The term health was not perceived to be any different from well-being. This underscores the need to understand lay perceptions and definitions of well-being to ensure health promotion interactions with communities are understood from the individual understanding and not purely from a medical perspective. Health promotion programmes may benefit from leveraging contextually appropriate approaches to enhance health and well-being in the workplace.

Objective two: To explore how employers' and employees' perceptions of health and well-being impact workers in the organisation.

Employers and employees talked about the influence they received from their colleagues who encouraged them to maintain health and well-being. Peers can be useful in encouraging employees to change behaviour, especially in physical activity and healthy dietary lifestyles (Ginis et al., 2013). Findings concur with a qualitative study exploring peer physical activity. It emerged that peer interventions were acceptable, and there was a positive change among employees (Edmunds, 2016).

Employers and employees perceived that their peers played a role in enhancing their health and well-being by being role models of healthy behaviour, providing peer support, and sharing health information. Interpersonal relationships in the workplace can influence health and well-being, as was seen in this study, in which employees encouraged one another to engage in healthy lifestyle behaviours. According to Nohammer and Schusterschitz (2013),

workplace health promotion programmes benefit employees because of their social nature and their capacity to influence people. Peer influence at work creates a feeling of belonging, and as employees identify with employer health and well-being efforts, they tend to increase their intentions to engage in healthy behaviour (Stephens et al. 2014).

Employers and employees perceived peers as an influence regarding their health and well-being behaviour. Employees encouraged their peers to participate in physical activities and improve their dietary lifestyle. Some employers and employees were considered health and well-being champions who were role models for healthy behaviours. Similarly, Van de Put (2022) conducted a study to find out if employees have an impact on their colleagues' health behaviours. The study showed that colleagues are more likely to change their dietary lifestyle and physical activity with the encouragement of health champions and role models in the workplace. Further, perceived health-related social influence and social support from co-workers were investigated by Burke et al. (2014), who found that individual's diet and exercise behaviours were influenced by their perceived health-related social influence. Colleagues' encouragement and role model behaviour can contribute to sustaining a health and well-being culture in the workplace.

The perception of employees that their colleagues were an influence on their health behaviour shows the impact employees can have in an organisation. The role of peers is recognised in literature, especially in psychology and mental health practice (Poremskiet al., 2022; Agarwal et al., 2020). Employees in this study mainly discussed the role model effect their peers had on them. Some peers played a role in nudging them to engage in health and well-being activities. This was especially true in activity and exercise. Peers are useful not only in supporting colleagues one-on-one but also in creating networks within the workplace that support the enhancement of the health and well-being of employees (Edmund, 2016).

Health promotion practice is about encouraging people to take charge of their health and well-being, and peer support is an important aspect of grassroots action. Building health and well-being networks in the workplace is useful in ensuring no one has been left behind. The involvement of health champions in planning health and well-being activities removes the leadership from seeming to assert behaviour in a top-down approach. The health champion is, therefore, useful as a link between employers and employees in ensuring continuity and adherence to health and well-being initiatives in the workplace. Health champions also play a role in the establishment of health culture, which is essential for sustainable workplace health and well-being programmes. Marenus et al. (2023) did a scoping review that looked at health and well-being outcomes associated with workplace health culture and found out that high leadership, a conducive environment, and co-worker support are associated with health risk reduction disease.

Social media platforms are an integral part of communication in Kenyan society and can be important for sharing health information in various contexts, including workplaces. The most common method of communication discussed by employers and employees in this study was through social media platforms. This finding is similar to (Liu et al., 2022), who talk about the use of the Internet and social media platforms through mobile phones across widespread mobile networks. However, most content is about individual health behaviour change in general and not necessarily focused on the context in which people find themselves. According to Rothman et al. (2020), health information should not just be content-based but should be more effective if it is interactive between both parties. Rothmann et al., reiterate that health messages that are framed to match a person's context may have a more persuasive effect towards change of behaviour. According to Kahneman and Tversky (2013), sharing positive information boosts morale and improves potential change of behaviour as opposed to negative information about the consequences of bad behaviour. Employers and employees

shared concerns regarding the accuracy of health information shared in the workplace, whether via social media or among peers. Regarding health information, in a systematic review done by Malik et al. (2014), 39 out of 598 studies were about health promotion messages and information interventions.

Objective three: To explore employers' and employees' perceptions of how organisations can improve health and well-being in the workplace.

The workplace is seen as a suitable site for initiating employee and employer health promotion and disease-related activities and interventions directed at improving individual health behaviours and health outcomes (Harris et al., 2022; Wiman et al., 2016; Blake et al., 2013). In this study, employers seemed positive and willing to try out health and well-being initiatives in their organisations. This may lead to gains in workplace health implementation uptake (Pescud et al., 2015)

There is also evidence that physical activity reduces employee absenteeism in healthcare costs and improves employee performance at work (Lier et al., 2019; Mattke et al., 2014). Employers and employees perceived that the organisation had a role to play in enhancing health and well-being in the workplace. Employers' perceptions of organisational support were about actions taken by organisations to ensure a healthy working environment. In this study, the organisation's role was perceived to include occupational safety and ensure overall health enhancement.

Findings relate to (McLellan, 2017), who opines that more recently, organisations are prioritising investment in actions that go beyond safety, such as access to healthy food, opportunities for physical activity and mental health. For example, workers should be able to have annual health checks to gauge the health status of the workforce. Employers discussed the effort they are making through partnerships with insurance companies to conduct health

promotion campaigns where health talks are done. However, the role of insurance companies is not very clear in Kenya. Because of Kenyans' dependence on employers to fund their access to health services, insurance companies tend to aggressively market their services to employers more than the general population. However, the concern that insurance companies are more interested in increasing members than preventing chronic disease remains among employers. The involvement of insurance companies can be beneficial in that it creates an avenue where programmes can be established to enhance the well-being of the organisation as a social corporate responsibility action or as a mutual agreement between the insurance and the employer. Further research in this area is necessary to understand how this can be exploited in the Kenyan context.

In the USA, where health insurance plans are common, a study was conducted to explore the role insurance companies play in workplace health and well-being promotion. The study showed that insurance companies offer programmes that promote healthy lifestyles, and they are in demand by employers seeking to lower costs related to sickness absence presenteeism with positive return on investments (Murphy et al., 2010).

However, in this study, it emerged that not all employees have access to health insurance or any form of health and well-being plan at work. This is evident given the fact that health insurance uptake remains low in Kenya, so few employers offer health insurance for their employees (Munge, 2019; Muthaka, 2020). Findings showed that employee’s perception regarding the role of the organisation was the role of covering the cost of health services. Kenya, like many other countries in SSA, has an increased burden of NCDS burden. NCDs in Kenya account for 31% of deaths in Kenya, and as discussed in the literature review, 80% of global deaths related to NCDs are from SSA. However, the rise in the burden of disease is not commensurate with increased resources and access to high-quality health services. According to Ammoun et al. (2022), there are shortcomings in the current readiness of public sector

health facilities to manage NCDs in Kenya. Their study revealed that the overall readiness of healthcare institutions to offer services was poor, particularly in the public sector, which most Kenyans depend on for low-cost services.

The lack of essential medicines and commodities for NCD management is one of the main challenges related to the high cost of care, which leads to patients having to source extra services from private hospitals (Onyango et al., 2018). This may be a key contributor to the rise in morbidity related to NCDs, where quality of life is reduced and increased hospitalisation per person is on the rise, so that 50% of patients admitted to Kenyan hospitals have non-communicable diseases. Given the rising cost of healthcare, especially management of non-communicable diseases, most Kenyans have to pay for private care, which is expensive. Employees, therefore, become dependent on employers to fund their health through insurance coverage because they cannot afford to pay for health financing on their own. It is known that a high burden of non-communicable incidents has a huge impact on household resources and financial status. According to Mtintsilana et al. (2023), out-of-pocket expenditure on healthcare costs has catastrophic implications due to the nature of NCDs, which are long-term diseases. NCD's financial burden is said to be responsible for 27% of the reduction in household income. Because of the chronic nature of NCDs, they are associated with frequent outpatient visits and requirements for investigation and long-term medication. This may explain why absenteeism was a concern for employers in this study because the ripple effect on employers and employees is increased cost to the business and increased burden to employees who have to take up the workload for their absent colleagues.

According to Kenya's Universal Health Coverage policy, healthcare costs are supposed to be covered through the National Hospital Insurance Fund, which is a government-owned enterprise. However, this is only compulsory for those employed in the public sector.

Employers in the private sector may choose not to pay for their employees, so only about 20% of Kenyans pay into the government-based insurer.

Findings showed that employers are finding other ways to enhance health and well-being in the workplace through activities. For example, one organisation offered opportunities to exercise through a subsidised gym membership. Literature supports organisational support and enhanced health and well-being culture in the workplace. However, participation is a challenge even when the organisation is willing to pay part of the costs. Barriers expressed by participants in this study included lack of time to attend gym sessions, work-life balance issues and cost. In a study done by Lier et al. (2014), strong organisational support and co-payment were important drivers of employee participation. Literature also supports the perception regarding challenges and reiterates that organisational support is essential in enhancing employee's participation in healthy lifestyle activities and has an impact on health and well-being culture and medical costs (Grossmeier et al., 2020; Goetzel et al., 2014; Kent et al., 2016). This finding is also supported by research done by Passey et al.l (2018), who did a mixed-method study to explore barriers and facilitators to employee participation in wellness programmes where employers expressed workload issues, challenges with resources and lack of employee buy-in. They cited that lack of awareness and manager training were key determinants in enhancing participation (Passey et al., 2018). Similarly, in another study, NHS leaders cited reluctance to invest in staff and busy work environment as some of the challenges, while staff cited lack of time and difficulty in accessing health and well-being services as barriers (Quirk et al., 2018).

Access to healthy food while at work was perceived as a determinant of healthy dietary behaviour. Employees expect the organisation to provide amenities for healthy food access, like staff canteens, where control measures to ensure healthy foods are served are more feasible. Similarly, a study by Czarnieka-Skubina et al. (2020) found that employees

appreciated access to staff canteens, especially the pro-health meals served as opposed to ordinary restaurants. In another study, it emerged that workplace structures and systems, as well as choice and availability of food choices, influenced dietary behaviour (Pridgeon & Whitehead, 2013). The findings of this study suggest that workplaces can play an important role in shaping the dietary behaviour of employees by enhancing conducive workplace-based food structures and healthy food choices. Organisations' food structures, like staff canteens, can provide avenues through which health promotional campaigns can be implemented (Lake et al., 2016; Smith et al., 2017; Fitzgerald et al., 2016).

Employers and employees perceived being healthy and productive as part of enhancing health in the workplace. For example, the impact of absence of sickness on productivity affects not just the organisation but also individual employees. McLellan (2017) argues that from an employer's perception, productivity and engagement are more important than employee lifestyle and general health. Conversely, the consequence of ignoring that employee health behaviours are linked to poor health and chronic disease, which impact productivity and medical costs.

Creating a balance between productivity and stress reduction is a delicate aspect of employee health. As employers and employees noted, absenteeism can increase stress for other employees who have to take up the workload. According to Jinnett et al. (2017), job demands and employee workload are an important part of health and well-being because these have an impact on productivity.

Employers perceive that health and well-being are important for productivity and reduction of health costs in terms of health insurance, reduced absenteeism and presenteeism. However, measures to establish an enhanced health and well-being environment seem to be done reactively to address workplace health challenges as they happen and not necessarily as an

informed, deliberate programme. For example, the employer talked about how they introduced health days and subsided gym after employees suffered cardiovascular events while at work. This is likely to be the case where recommendations or regulatory frameworks do not exist or are poorly understood. Similar experiences were found in a study done by Hammerback et al. (2015), where although employers had occupational health guidelines, their workplace health and well-being efforts were minimal, with one or two interventions being implemented.

Moreover, there are few studies whose findings show that implementing multicomponent intervention has an advantage in terms of cost-effectiveness (Pieper et al. (2019). Although the issue of healthcare costs was discussed by employers in this study, there are no studies in Kenya that adequately quantify lost income, cost of lost time at work or absentee time due to illness. Further research in this area can help to understand and improve employee health based on sound evidence.

Employees perceived that a supportive employer influences their health and well-being. They felt that an enabling environment where they have access to amenities like healthcare, a gym to exercise and access to healthy meals, among others, improved their lifestyle behaviours. According to Hoert et al. (2018), there are links between organisational support and employee participation in improving their health and well-being. Moreover, knowledge of organisational support for health and well-being enhancement helps employees take an interest in improving their health.

Creating an enabling environment for the enhancement of employee health and well-being is important for successful health outcomes. In this study, employers and employees are aware of the importance of living a healthy lifestyle but feel that their workplace has an impact on how successful they can be in this endeavour. There is potential for leadership in health and

well-being promotion through offering health and well-being enhancement support to employees (Koining & Diehl, 2021). Employers in this study have made attempts to provide some resources for enhancing health and well-being. However, there was little cohesion and involvement in the implementation of health and well-being activities. This could be related to the fact that employers did not have a health and well-being programme as such, but single activities either as a response to a problem or random decision.

Health and well-being promotion is about creating an enabling environment for people to take responsibility for their health. Some employees had the perception that the employer needed to provide the resources first, then it would be possible for them to engage in activities. This shows a lack of ownership and self-motivation among employees who feel dependent on the employer or leadership for their health and well-being. This results in a blame game, and challenges like lack of access to healthy foods and lack of time to exercise, among others, are solely perceived to be a leadership support problem. Sharing responsibilities and giving such employees a role in planning may change attitudes and enhance creativity in designing solutions.

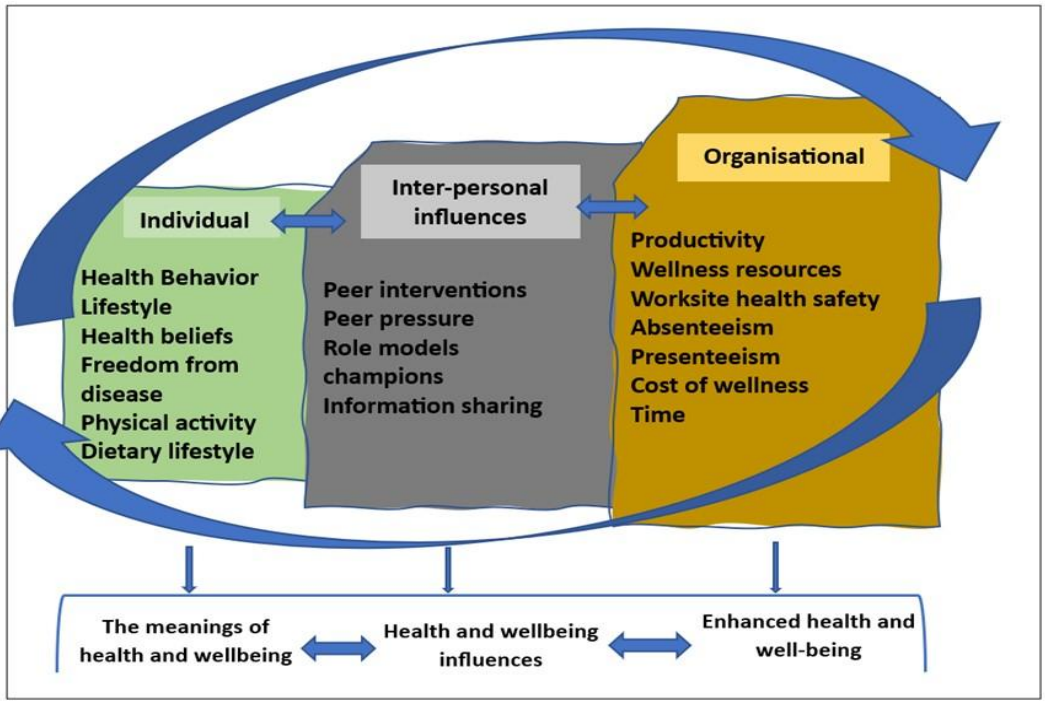

Figure 11 Conceptual model showing perceptions of health and well-being in the workplace.

Conclusion

This chapter includes a discussion of the major findings of this study, which were presented in chapter six. Interpretation of findings was done to show how they align with current literature and how the findings addressed the objectives of this study. The discussion is summarised by the presentation of a workplace health and well-being concept model (see Figure 11). The next chapter will provide an overall summary of key findings, contribution of the study, recommendations, and limitations of the study.

CHAPTER SIX

KEY FINDINGS, IMPLICATIONS, RECOMMENDATIONS AND LIMITATIONS OF THE STUDY

Introduction

In this chapter, the overall summary of the study is presented with reference to the preceding chapters. Key findings of the study are discussed as reflected by the themes generated from this study. Implications of this study are discussed, and the contribution of this study is discussed. Recommendations for future workplace health promotion practice, government employers, nursing practice policy and research are presented. Limitations of the study are also discussed in the final part of this chapter.

Review of the research

Workplaces are known to provide access to diverse population groups for the promotion of health and well-being and the prevention of disease. Kenya is currently experiencing a rise in NCD incidence among its working-age populations, accounting for 27% of total mortality, and it is projected that by 2030, NCD incidents will increase exponentially. In this regard, Kenya has prioritised health promotion and prevention of NCDs, especially diabetes, hypertension, cancers, and cardiovascular diseases, to minimise the heavy burden on an overburdened healthcare system.

The literature review done in chapter two has shown that the workplace is one of the suitable sites where Kenya can leverage the prevention of chronic diseases and health promotion for a large segment of the population in workplace sites. Although the workplace has been identified as a suitable site for disease prevention and promotion of health, there was little information or knowledge regarding health and well-being enhancement in the Kenyan workplace and how this space would be utilised for the prevention of NCDs within the

Kenyan context. This study sought to understand the perceptions of employees and employers regarding health and well-being in the Kenyan workplace context.

The literature review was done to identify available evidence on concepts of health and well-being. The review looked at existing literature on health promotion practice, workplace health and well-being practice, global and local status of NCD incidence and management and prevention of NCDs. Literature review showed that the concepts of health and well-being are complex and multifaceted and continue to create debate across the professional divide regarding the best way to define these concepts. However, the conceptual discourse has largely been among health professionals, academics, and scientists. Little is known about lay concepts of health and well-being and how their perception may impact health behaviour and health outcomes. The literature review also showed that few studies have been done to understand the perception of health and well-being concepts among Kenyan lay populations and more so among employers and employees in the workplace context. This study identified this gap and sought to understand how ordinary Kenya in the workplace perceive health and well-being.

Literature review was done regarding health promotion and showed that health promotion practice aims at enabling people to be responsible for theory health and well-being within their contexts. Health promotion's main focus is to re-orientate health from a medicalised focus to a more inclusive and participatory approach in matters about people’s health, either as individuals or in communities. Through the literature review, gaps exist concerning implementing a bottom-up approach as management and prevention of disease remain largely under a medicalised model that centres more on curative services than preventive services. Literature showed that workplaces are important settings in the promotion and prevention of disease, and in keeping with principles of health promotion, the setting approach advocates

for moving health and well-being to where people are and can be empowered to participate in enhancing their health and well-being.

There is little research discussing the promotion of health and well-being in Kenyan workplaces, and a gap was identified regarding knowledge about the current status of workplace health and well-being practice in the workplace and to what extent employees and employers are empowered for this purpose. Literature showed that workplace health and well-being programmes offer benefits for early detection of disease and enhance behaviour modification to reduce risk for chronic diseases. According to the literature, workplace health and well-being programmes benefit organisations by reducing absenteeism and increasing productivity and healthcare costs. However, most of this research came from countries outside SSA and Kenya; hence, there is a need to understand if this was the same situation in the Kenyan workplace.

The burden of NCDs is high in Kenya, and the literature review confirmed that NCD morbidity was still on the rise and prevention was still below average, management and prevention activities continued to be hospital-based, and there was little empowerment of healthy populations in settings like the workplace. The literature gap in NCDs study showed that there were not many qualitative studies done to understand the perceptions of ordinary Kenyans regarding NCDS prevention in the workplace, and those that existed focused on studying a specific disease and not the other factors related to chronic disease issues. Literature confirmed the importance of evaluating Workplace health and well-being programmes and doing preliminary research before implementation of programmes. To address the gaps identified from the literature review, the objectives were to explore employer and employee perception of health and well-being, 2) Explore how employer and employee perception of health and well-being impacts the organisation, and 3) Explore employer-

employee perception of how an organisation can improve health and well-being in the workplace.

The study used a qualitative approach to gain an understanding of the perceptions of workplace health and well-being. Truth and knowledge are subjective, and there is no one truth or reality, but reality is constructed by individuals' multiple perspectives of their reality within the workplace setting. The qualitative approach enabled flexibility in gaining rich information using semi-structured interviewing to gain employers' and employees' voices and the reality of health and well-being, as opposed to objective data, which may not have been fully effective in this regard.

Key findings of the study

Finding related to objective one: To explore employers' and employees' perceptions of health and well-being concepts.

From the findings of this study, health and well-being were perceived to be multidimensional and centred on individuals' knowledge, beliefs, culture, and interactions with others. The literature review in this study revealed that there are many ways of defining health and well-being concepts, and the professional environment in psychology, medicine, and others agree that context is a key determinant of how these concepts are perceived.

From the findings, professional definitions of health and well-being were not constructed in the same way by employers and employees who are lay persons with no background in medicine. Employers and employees did not seem to perceive health and well-being as separate concepts but generally utilised health as an overarching concept of health and well-being. As previously discussed in chapter five, Employers and employees talked about what health and well-being meant to them by using examples of what they viewed as a healthy person, for example, if someone had no sickness or any mental health disturbance. Others

construct health and well-being by keeping with the kind of lifestyle one practices, including dietary lifestyle, maintenance of activity, and exercise. Others perceived health and well-being in terms of productivity, such as whether the employee was able to do their work as required, was not sick, and was unable to carry out their duties with the level of quality expected. So, from the findings, it was clear that the discourse about health and well-being between employers and employees was based on their knowledge, views, beliefs, and interactions within their social space.

Perceptions of health and well-being in this case were not based on scientific evidence or bio-medical knowledge, as would be the case in the healthcare context. This finding emphasises the need to understand lay conceptualisation of health and well-being to enable contextually appropriate approaches to health promotion, designed with the understanding of employer and employee perceptions instead of those based purely on medical perspectives. Further to this, health behaviours were discussed in line with good or bad behaviour, for which the consequence was that either one became ill or was free from disease. Employers and employees showed awareness about the importance of living a healthy lifestyle not from a scientific basis but from their opinions within the context of their social environment and workplace context, as well as culture and beliefs. Employees expressed their thoughts about a healthy lifestyle and about what was right or wrong behaviour.

The main discourse of health and well-being behaviour, as discussed in Chapter 5, is centred around dietary lifestyle, exercise maintenance, and being free from disease. For example, dietary lifestyle is determined by culture, beliefs, or personal observations, and behaviour is guided by traditional norms about food choices and how food should be prepared. These perceptions represent knowledge and level of awareness about food as opposed to existing facts about diet and health. Social influences on dietary behaviour were perceived as a challenge to the maintenance of health and well-being. Food choices, for instance, were

influenced by products available in the market. For example, the proliferation of fast foods both in the workplace and in the home areas is a challenge. There are financial factors that impact choices about maintaining a dietary lifestyle, like food cost, which will influence not only food choices but the quality of food being eaten.

Environmental factors like lack of amenities that support healthy dietary behaviour, like access to healthy eating places at work, were raised by Employers and employees, and where such facilities exist, unhealthy foods may be the only choices employees have available. Findings show that despite employees having awareness about healthy dietary lifestyles, other factors that are beyond their control can influence their behaviour and healthy lifestyle decisions.

Perception of health and well-being around physical activity and exercise

Findings showed that this was viewed as an important factor in the prevention of chronic diseases. Employees showed awareness about the importance of being active, even for those who did not necessarily engage actively in exercise. The workplace was perceived to be a key influence in how active someone became. For those whose organisation attempted to offer resources for maintaining activity and exercise, there was positive interest as opposed to those who were not supported at work. Facilitation by the employer included subsidised fees for the gym and opportunities to go for marathons and walks. Findings show that activity and exercise are heavily reliant on the workplace environment and employer support. This is a critical factor because employees who spend most of their time in the workplace tend to perceive that the environment should be supportive of being active. Self-motivation was another factor, as was seen in this study, where employers and employees found their own time outside work to exercise, while others felt that employers should provide protected time for exercise.

Perceptions among employers and employees regarding the incidence of NCD

Employers' and employees' understanding of NCD risk was that these are lifestyle diseases, and a person's healthy lifestyle could determine the risk of getting the disease. Some employers and employees had experiences with people they knew who had diseases like cancer. Healthcare costs were a concern, and employers and employees felt that the employer was central to their meeting healthcare costs by paying annual health insurance coverage for hospital admission and treatment. These perceptions are due to the high cost of healthcare in Kenya, where even if you go to a public hospital for treatment, you will still have to go to a private clinic for some investigation and medicines. There is no free access to health care. Employers in Kenya are key stakeholders in the prevention of NCDs as they should the cost of their employees when they have health problems.

Findings related to objective two: To explore how employers' and employees' perceptions of health and well-being impact workers in the organisation

Findings also revealed the impact employee perceptions of health and well-being have on the organisation. This was especially evident with regard to peer support. Some employees were self-motivated towards maintaining a healthy lifestyle and have become role models for other employees to emulate. Their health behaviours positively influenced other employees' behaviour. Others are able to encourage fellow employees to maintain a healthy lifestyle by nudging them towards healthy behaviours like exercise and healthy eating. Among peers, there is sharing of health information either through live conversation or via social media. However, this information is not verified, and it is left to the employee to gauge whether this is reliable information or not.

Findings related to objective three: To explore employers' and employees' perceptions of how the organisation can improve health and well-being in the workplace

The findings of this study also revealed that employers and employees are engaging in health and well-being practices at work, both at a personal level and collectively within the organisation. However, a deliberate and systematic model or framework to guide health and well-being practices is lacking. Employers understand the importance of health and well-being enhancement in the workplace and have attempted some interventions by trial and error, but these have been difficult to sustain. There is an understanding regarding the impact employee health and well-being have on productivity, absenteeism, stress, and healthcare costs to workplaces or organisations. In addition, employers and employees appreciate the need for programmes to manage and establish health and well-being practices for the enhancement and maintenance of optimum health and well-being of workers, but they cannot establish sustainable programmes or support from health promotion experts to assist.

Findings have also confirmed the gaps identified in the literature, such as a lack of concerted effort in Kenya policy and OSHA ACT to holistically address health and well-being in the workplace. Organisations where this study was done adhered to occupational health and safety regulations, such as personal protective equipment, warning signs, and emergency protocols, among others. However, OSHA activities were treated entirely as a separate issue to health and well-being. However, from the findings of this study, it is evident that there is a need to review the existing OSHA act to include aspects of holistic health and well-being practice so that there is less likelihood that one aspect is the main focus at the expense of the other.

This study also revealed that there is no presence or collaboration with healthcare workers or health promotion experts. Employers are just doing what they can and are unaware of which groups of experts they can work with. There is little understanding of the role of community

health nurses in enhancing health and well-being in the workplace, and there is no presence of healthcare workers in general to support healthy populations in the workplace where prevention of disease and promotion of health and well-being can be successfully initiated.

Empirical implications

Employers and employees constructed their perceptions of health and well-being at three levels within the workplace: individual, interpersonal, and organisational. However, although the themes derived from findings are discussed within these levels, there are interconnections between the levels. For example, perceptions that health and well-being mean eating healthy foods impact individual dietary behaviour, but at the organisational level, there may be challenges in providing access to healthy meals at work. This interplay and connectedness of themes highlight the need for holistic approaches in establishing health and well-being initiatives in the workplace.

According to the findings of this study, meanings of health and well-being are contextual and shape individual health behaviour within inter-personnel interactions with other employees and the organisational environment in the workplace. Perceptions of health and well-being were also multidimensional and not focused on one aspect of health. Employers' and employees' descriptions of health and well-being meaning elicited the multidimensional nature of health and well-being but also utilised the concepts as one concept and did not seem to separate health from well-being. Individual constructions of health and well-being were not similar to that of WHO, which discusses health in the domains of complete physical, social, and mental well-being but focuses on health behaviours and their relationship with prevention or being free from disease. The findings of this study support the notion that health and well-being concepts are dynamic concepts and are subject to individual perception within their environmental context.

In addition, findings show that health and well-being concepts are interconnected with the individuals' daily interactions with their work life. Employers' and employees' perceptions of health and well-being showed that health behaviour may determine whether one is healthy or unhealthy. This was discussed in regard to dietary lifestyle and physical activity, which were identified as key in the prevention of chronic diseases. Employers and employees are aware of the high incidence of chronic diseases and mention cancer, hypertension, and diabetes as the leading health problems among the Kenyan population. Awareness and desire to be free from disease may be the underlying factors leading to interest among employees in adopting a healthy lifestyle. According to the health belief model, perceived susceptibility to disease may lead to a change in health behaviours. Similarly, the perceived severity of the disease and the consequences of becoming ill may also lead to a change in behaviour (Abhar et al., 2022). employers and employees' perception of health and well-being and their health behaviours, like enhancing activity-exercise and adopting a healthy dietary lifestyle, are key predictors for better health outcomes in future workplace health promotion and disease prevention programmes.

Employers and employees had an impact on individual perception of health and well-being with regard to inter-personnel interactions. Peer influences that resulted in conversations around healthy lifestyles generated interest in health behaviours and their impact on individuals. Findings showed that workplace peers play an important role in enhancing healthy behaviours by influencing group think toward healthy behaviours at work like exercising, eating healthy meals and sharing health information. Perceived benefits of health and well-being can influence beliefs about changing health behaviours for some employees. However, others may not - this was evident among employers and employees who viewed peer support as peer pressure and a source of discouragement. Role models influenced employee perception and were viewed as being healthy because of their engagement in

physical activity and exercise or healthy dietary behaviours. Health champions rallied fellow employees to engage in health-enhancing activities even during time off from work. Their enthusiasm influenced others to perceive physical exercise as important in the prevention of disease and health maintenance.

Although the perception of health and well-being showed that maintaining a healthy lifestyle was important to the prevention of disease, not all employees expressed interest in engaging in activities like exercising or eating healthy diets at work. These employees talked about barriers that hindered them from engaging in health and well-being activities or lifestyles, including lack of time.

Time was perceived to be key to success in engagement, especially with regard to activity and exercise. Some felt that employees should be given time dedicated to these activities and not be expected to use their time off work. Amenities like gyms were not easily accessible and therefore not favourable choices. Time to prepare healthy meals was not available, so it was easier to pick ready-made unhealthy fast foods that were easily available at work.

Employees perceived that the organisational environment is important but that employers are responsible for providing resources that support the maintenance of health and well-being. For example, time for mental health breaks, access to healthy foods in workplace cafeterias, subsidised gym memberships to increase activity and exercise among employees and health insurance, among others, are essential for healthy lifestyles. Perceived barriers to behaviour change may lead to a reduced sense of risk as the barriers are perceived to be the problem and not the behaviour. However, offering incentives, assurances of support and correcting misinformation may be critical to achieving behaviour change.

Conversely, employers perceived that healthy employees were more productive and added to the organisation's increase in revenue. However, employers view employees with poor health

as a liability related to the cost of their low productivity and the challenges of absenteeism and presenteeism. Employers, therefore, value health and well-being as important factors in the productivity and financial sustainability of the organisation.

From the findings, it is clear that individual perceptions of health and well-being are connected to influences from the inter-personnel environment, and organisational factors also influence health and well-being perceptions. This interconnectivity shows that perceptions of health and well-being and related behaviour not only impact the individual but also have a ripple effect on employees and the overall organisation. Findings further show that implications for health and well-being at work are not just related to behaviour but other aspects of work that impact health, including mental health, financial health, and health information. Addressing health and well-being in organisations will be effective where holistic strategies are applied and not where actions are handled in silos.

Practical Implications

Implications for community health nursing practice

Figure 12 Conceptual model – Integration of KRCHN in workplace health and well-being practice.

The KRCHN is a comprehensive nurse prepared to manage diverse population groups and health problems. The WHO (2017) describes essential components of community health nursing as disease prevention, health promotion, disease management and policy development. These components are in keeping with the scope of practice for KRCHN alignment with primary health care in the Kenyan context. The conceptual model in Figure 12 therefore illustrates the proposed role of KRCHN in workplaces which are within the PHC level of the Kenyan health system. The following discussion therefore explains how the

KRCHN scopes of practice define specific actions that are aligned to address the findings of this study at individual, interpersonal and organisational levels.

Employers and employees in this study perceive that health and well-being are important, and maintaining healthy behaviours at work was viewed as contributing to achieving optimum health and well-being. Employers are aware of the importance of employee health and well-being and its impact on productivity, issues of absenteeism and presenteeism, and healthcare costs, among others and are aware of the burden of NCDs on the Kenyan population. Some employers have attempted to have health and well-being programmes by introducing resources like subsidised rates for gyms or having health days and health talks.

However, attempts to establish health and well-being programmes by employers and employees have been, at best, dodgy and based on solving isolated problems like cardiovascular events in the workplace. Although there is awareness among employers and employees, there has not been a concerted effort to link workplaces with the healthcare sector to help with advice and facilitation of health and well-being programmes that are evidence-based and sustainable. Nevertheless, the findings of this study show the potential that exists in workplaces to access well populations, at-risk populations, and those already dealing with various NCDs-related health problems for health promotion and disease prevention.

As mentioned in Chapter 1, Kenyan workplaces generally do not have occupational health personnel as the role is not yet established in Kenya. There are a few organisations that have tried to fill this gap by utilising the KRCHN, such as construction and manufacturing companies. The KRCHN scope of practice allows them to engage with diverse population health and well-being needs to ensure that disease prevention promotes health and well-being across the lifespan. In this regard, the above conceptual model (see Figure 12) illustrates the

linkages that can be developed to establish the integration of nursing practice and the workplace for the enhancement of the health and well-being of employees.

Health promotion seeks to enable people to increase control over their health and well-being; hence, community health nurses are key catalysts, facilitators, and partners in enabling successful programmes in workplaces. Involving employers and employees in the participation process of identifying specific health and well-being needs ensures focused interventions targeted at specific health risk groups or health needs instead of assuming a one-size-fits-all approach. Aspects of integration of nursing practice include health education and support tools, Disease prevention, Disease management and Policy development.

Health promotion/education. Employers and employees in this study appreciated the health information they received from their peers and social media but were not sure how reliable this information was. Community health nurses' engagement with employees offers an opportunity for the dissemination of health information that is relevant and has been verified as useful for their use. Workers are also able to receive health updates directly from health sector representatives, allowing them to clarify issues that are not clear. Employers talked about utilising health insurance companies to organise healthy days and health talks. However, some employers feel that health insurance companies do these activities more for the promotion of health insurance products than for the prevention of disease and maintenance of health and well-being.

There is potential for community nurses to partner with these insurance companies to provide genuine health interventions and promotional activities for employees. Peer support and role modelling were viewed as important in enhancing awareness about health and well-being. Through collaboration with nursing practice, this group can be trained as health champions so

they acquire knowledge and tools for health promotion and become the liaison between community health nurses and the workplace.

Disease prevention and management. Integrations of community health nurses will facilitate the identification of employees at risk of diseases like non-communicable diseases and give appropriate health education for prevention. As discussed in earlier chapters one and two, 50% of hospital admissions are of patients with NCDs and late diagnosis and increased morbidity are common. The findings of this study show evidence of increased absenteeism and presenteeism impacting productivity and health costs. Interactions between community health nurses and employees create opportunities for health risk assessment, early diagnosis, and information and advice about appropriate behaviour changes to prevent disease. Medical emergencies like cardiovascular events mentioned by an employer in this study can be minimised through early identification of at-risk employees and facilitation to access treatment to avoid such situations.

Policy development. Health promotion involves giving people autonomy to improve their health and well-being by ensuring they have the knowledge and understanding to make the right choices for their health and well-being (Heck et al., 2022). Advocacy involves creating an enabling environment by minimising barriers and fostering equity in the provision of health services. Community health nurses are in a position to influence and facilitate policies that give employees equitable access to healthcare services, information and health maintenance resources at work (Heck et al., 2022; Williams et al., 2018). Through their interaction with employees, community health nurses can mentor champions to be agents of change in workplace health and well-being matters ((Mindel et al., 2022).

Implications for workplace health and well-being promotion practice

It emerged from this study that employees are aware of enhancing their health and well-being at work, and there are things that employees can do to enhance their health and well-being. Employees' belief in employer support and the value of their health and well-being can be a good predictor of future success and sustainability of health promotion activities (Holland et al. 2019). There is potential for employers to ensure coordinated efforts to sustain the gains. Employers and employees in this study gave their views regarding improvements that would enhance a culture of health and well-being.

Provision of health and well-being resources - One of the organisations had provided subsidised gym membership as an incentive to increase opportunities for activity and exercise among employees. However, this did not work well and finally fizzled out. Employers and employees in the study appreciated the offer but were still not able to afford the subsided rates and ended up having to go to the park in the city to exercise when off duty. The employees' proposal was an in-house gym facility because that would save costs as there would be no travelling to other places. Other employers and employees talked about issues with access to healthy meals while at work, either because food vendors in the workplace provided unhealthy foods or because of the lack of a cafeteria where healthy meals could be accessed. As a result, food choices were few and often resulted in unhealthy dietary lifestyles. The findings provide an opportunity for organisations to modify their built-in environment, for example, physical components, including healthy food vending facilities and dedicated areas for recreation activity and exercise.

Access to healthcare services - The public sector mainly provides healthcare services in Kenya. However, one must have health insurance to navigate healthcare expenses, especially for investigations and medical procedures. The perception of employees, in general, and even in this study, is that their employer should pay for health insurance coverage. It is normal for

people to spend a full day off work as they raise funds to pay for an investigation like MRI scans or to buy medicines. Increased morbidity of chronic disease is partly due to poor adherence to medical advice related to lack of funds. According to Bosma et al. (2021), providing support, especially for employees with chronic health problems, can lower the financial burden of sickness absence for the individual and the organisation (Mattke et al., 2014); Beck et al., 2016).

Utilisation of health champions - Employee support in the form of peer support is associated with better participation in health and well-being actions and better health outcomes. Employees are likely to be more responsive to communication about health and well-being support from peers, especially if they are role models. Creating health and well-being in-house teams facilitated by leadership support is likely to increase participation and interest in actions identified by the organisation (Zollar et al., 2023).

Implications for research

This study was done to understand the perceptions of health and well-being among Kenyan employees and employers. The findings of this study have opened an opportunity for further research in workplace health and well-being promotion and practice. Employers and employees talked about their concerns about the increasing burden of NCDs and were able to identify NCDS like cancer, diabetes, and hypertension. Further research would be useful to find out the health status of the 'working well' population to identify those at risk of developing disease, those who may have the disease but are not aware and those who may be in advanced stages of chronic disease but have challenges in health service access. A mixed-method study would be suitable to collect objective data regarding the incidence and management of chronic disease among the employed and the impact of work on their health outcomes.

Employers mentioned the impact of illness on productivity and the cost of absenteeism in the workplace. It would be useful to do further research and quantify the financial impact of health and well-being status on the organisation. Further research regarding the role of health insurance and other actors involved in the workplace health and well-being business would shed more light on the needs of employees and the challenges facing them.

Contributions of the study

Health promotion practice emphasises enabling people to increase their participation and control of optimising their health and well-being. Understanding lay perceptions of health and well-being gives health promotion practitioners important knowledge that can be utilised to facilitate communities to enhance their health and well-being. This study provided evidence that can be used by community health nurses and other health promotion practitioners to design future engagement with employees for health promotion and prevention of disease purposes. Having a background understanding of lay perceptions of health and well-being enhances the accuracy of health information and support given to healthy populations to guide them in taking responsibility for their health and well-being.

In summary, this research has fulfilled the following:

This study addressed the gap in limited studies discussing health and well-being in the Kenya workplace context. Most research has focused on occupational health and safety to national OSHA and not on the overall aspect of the health and well-being of employers and employees. The study added to the body of knowledge regarding workplace health and well-being in the Kenyan context and has brought to light the current status and practices of health and well-being in the Kenyan workplace context.

The findings of this study revealed the possibilities that exist for enhancing health and well-being in the Kenyan workplace and showed that employers and employees are willing to

participate and be engaged as necessary to build on what already exists. This study has uncovered new knowledge regarding the current status of health and well-being in the Kenyan workplace environment, the perceptions of the employer community, and existing organisational health and well-being needs. This knowledge will inform the future design of workplace health and well-being programmes that address primary needs for a specific workplace instead of one-size-fits programmes that may not be suitable for some workplace contexts.

The study articulated that perceptions of health and well-being among employees and employers are diverse and defined according to individuals' knowledge, beliefs, culture, and social interactions within the context of specific workplace and lifeworld. These constructs of health and well-being among employers and employees have been summarised in a concept model (see Figure 11) that will be useful to inform future health and well-being research and design of workplace-based health promotion and disease prevention.

The finding of this study identified that there is a gap in the facilitation and guidance of workers in Kenya to enrich current steps taken in organisations to enhance their health and well-being. Engaging and facilitating population groups to enhance their health and well-being practices is within the scope of practice for community health nurses in Kenya. There is a need for community health nurses to engage with this ignored part of the population and facilitate workplace-based health and well-being initiatives that are evidence-based and can be sustainable. From the findings of this study and the existing knowledge about community health nursing's role in health promotion, a conceptual model (see Figure 12) was developed and proposed for future design and evaluation of integrated community health nursing and workplace health and well-being practice in the workplace.

Limitations of the study

One of the limitations was that this, being a qualitative study, is focused solely on the accounts of the employers and employees and my interpretations. This leaves a possibility for bias either by employers and employees whose responses can be influenced by social desirability to fit in or by the researcher who may desire to make certain interpretations according to their own preferences. This was checked through creating rapport with the participant and reassuring them that their information would remain confidential and that there were no right or wrong answers. The use of thematic analysis may have allowed bias or lack of objectivity. However, the findings of this study support and have shown consistency with literature from studies done in different parts of the world. This has improved the confidence in the findings and improved replicability.

The organisations that participated were all from the private sector. This means that we have yet to know what the situation is like in the public sector, which is an important player in employment in Kenya. Nevertheless, the exploratory nature of this study gives substantial evidence to support future research with other organisations in the public sector. Further research from the wider participation of other organisations, such as public and faith-based organisations, will be beneficial in offering different perspectives. There were a limited number of employers and employees in the study, which may have been small, but this was because the nature of the study was qualitative.

Recommendations

Re-imagining the role of KRCHN in the workplace health setting

The KRCHN in Kenya has been prepared to offer comprehensive healthcare services for all populations across the lifespan. As stated in previous chapters, KRCHNs are currently utilised in acute and primary care services at various levels of healthcare. However, as health indicators become complex with the rising burden of NCDs, there is a need to diversify

health promotion and prevention initiatives in well-populated settings like workplaces. The findings of this study showed that there is very little interaction between well populations in the workplaces and healthcare workers, including nurses, who are the primary responders at the primary healthcare level. Findings also showed that employees spend a lot of time navigating the healthcare system for their healthcare needs, and this has resulted in absenteeism and presenteeism, which has, in turn, impacted the cost of productivity in the workplace.

In Kenya, we do not yet have an occupational health cadre of nurses, and instead, the KRCHN, who has the requisite skills in community health nursing, is expected to fill this role within PHC. As discussed in earlier chapters, the Kenya OSHA Act has not addressed holistic workplace health and well-being or integration and utilisation of healthcare workers in the workplace health promotion process. For the establishment of sustainable engagement of nurses in the workplace health and well-being environment, the role of the KRCHN and a new understanding of occupational health nursing role will require re-imagining and re-orientation of the current approach and utilisation of this cadre. There is a need for the Nursing Council of Kenya, the National Nurses Association of Kenya, National and County chief nurses, and Nursing academics to consider how the integration of the KRCHN in the occupational health role and workplace health promotion setting will be accomplished. In considering this recommendation, legal and financial implications, as well as the scope of practice, will need to be addressed.

Legal implications

As discussed, the current Kenya OSHA Act does not include the integration of health and well-being practices in the workplace setting. A review of the OSHA Act will be necessary to integrate nursing practice into the promotion of health and well-being practice in the

workplace. Clear guidelines and a legal framework within the Act will define the scope of implementation, related quality assurance activities required, standards of practice, and clarification of KRCHN, as well as the employer and employee role.

Nurses' practice is governed by the NCK Act and many other legal Acts that protect the public and the professional in the implementation of health services. This legal implication will need to be addressed for a smooth transition to sustainable implementation of health and well-being promotion in the workplace setting.

Financial implications

From the findings of this study, it is recommended that the KRCHN role be integrated with workplace settings to offer holistic health and well-being services for employees. This will open new opportunities for KRCHN to work in a new setting and with an expanded role in occupational health nursing. For this to be implemented, clear remuneration, job description and reporting hierarchy will need to be defined.

The Public Service Commission (PSC) is responsible for designing job parameters within which various professionals work by designing job groups that match the specific roles and reporting relationships. This has implications for government investments and budgetary allocation for employers both in the public and private sectors. There is a need to agree between nurses and PSC whether nurses will be seconded to workplace settings in the public sector and report to the County Chief Nurse or will directly be absorbed as personnel within various workplaces where they are posted.

Implications for the scope of practice

There is a need to consider how the scope of KRCHN will evolve to define elements of occupational health nursing that will be included in the current scope of practice for KRCHN. The current KRCHN scope of practice defines the role of PHC, that is, community units,

health centres and referral hospitals. However, given that there is no current integration of health and well-being promotion in the OSHA Act, the KRCHN scope of practice has no specific scope definition for the workplace as a health promotion setting. The current utilisation of KRCHN in the workplace is more about offering health services that are within the scope of the health centre. It is, therefore, left open as a prerogative for KRCHN to design workplace well-being in their own jurisdiction.

There is a lack of equity and quality assurance because there are no guidelines and clear scope parameters for the KRCHN to implement. It is recommended that the NCK define clear guidelines about the scope of occupational nursing practice in the workplace setting to allow equity in the holistic delivery of health and well-being services in the workplace setting.

Health promotion research

This research included two organisations and was exploratory, focusing on health and well-being in the workplace. Further research is recommended covering the public sector, where government employees are represented. This would enable the study of a wider population and make the findings more generalizable. Employers and employees acknowledged the importance of health and well-being programmes. However, they did not know how to ensure established processes to implement sustainable programmes. Where attempts have been made, they are isolated events geared towards encouraging, for instance, physical exercises or walking in the park once a week.

A coordinated approach towards sustaining a healthy lifestyle in the workplace is necessary. Employers mentioned that there is some collaboration going on with other stakeholders, such as insurance companies, where their employees pay for health insurance. Further research is recommended to understand the role of these insurance companies and how they can be involved as necessary within an established process to ensure evidence-based sustainability.

This study showed that workers are aware of the current burden of NCDs in Kenya and understand the connection between lifestyle and non-communicable diseases. Employers also talked about challenges with sickness absence, and some have had incidences of cardiovascular events.

Research is recommended to understand the current health status of employees in Kenya workplaces who may be assumed to be a good population, yet there may be a high prevalence of chronic disease or at-risk populations which remain unidentified. Findings showed that there is a concern from employers regarding the cost of absenteeism; however, little is known about the actual cost of absenteeism, especially that related to employee health and illness.

Future research is recommended to understand the direct cost of illness-related absenteeism in the workplace. The perception that employers should play a role in contributing to employee's healthcare costs gives an opportunity for further study into the actual cost of healthcare to employers and its impact on the health-seeking behaviour of employees. This was an exploratory study about perceptions of health and well-being. However, from the findings, the fact that employers and employees mention NCDs as diseases of the highest concern.

As seen in the literature, there are many studies discussing the prevalence and incidence of NCDs in Kenya, but I am not sure how many studies have focused on the incidence of NCDs among Kenyans in full-time formal employment and the impact this has on the overall national disease burden. This information would be useful in enabling targeted primary and secondary intervention in terms of reducing risks and incidence of NCDs and appropriate management of employees with NCDs to minimise morbidity.

Further research could also be done to understand what support, if any, is given to employees who are known to have NCD illnesses. This is especially in keeping with ethical issues

regarding managing employees with chronic illnesses and how, for example, chronic illness of an employee impacts their salary, job retention, and promotion, all of which have an impact on NCDs morbidity and even mortality (Vijayasingham et al., 2020). The findings of this study showed that some employers are already engaged in enhancing the health and well-being of their employees. However, it would be important to know more about awareness among a larger community of employers regarding their perceptions about their role in enhancing health and well-being and to what extent are employers in Kenya invested in health and well-being enhancement, especially in environmental factors like healthy buildings and amenities.

Organizations - Employers

The findings of this study gave a snapshot of the perceptions among employers regarding health and well-being. It is recommended that organizations work with the health sector to understand more about the challenges in Kenya regarding NCD prevention and the role organizations play in enhancing the health and well-being of employees. Findings showed that there is some level of dependency upon organizational leadership to provide resources for the enhancement of health and well-being.

Some of the recommendations from these findings include support for an environment that enables employees to thrive. For example, cafeterias can be provided where healthy food vendors can be licensed to manage and provide food at a subsidized cost supported by the organization. Health breaks should be provided to improve mental health and reduce work burnout, as well as enable employees to engage in exercise like walking. It is, however, recommended that employees participate in planning such measures so that they value these resources and be responsible for their health.

An understanding of the importance of involving employees is key to sustainability. Health promotion principles encourage the involvement of all so that there is ownership of the risk and a sense of responsibility for one's health. Access to healthcare services is important to employees, and they depend on their employer to pay for insurance coverage. Organizations in the private sector have leeway to pay or not to pay. However, not paying health insurance for employees may actually be counterproductive as the impact of poor access to health services may lead to increased sickness absence rates, which has cost implications for the organisation.

Government Agencies

Reducing modifiable risk factors and subsequently lowering the risk of NCD prevalence is critical and in the best interest of LMIC countries like Kenya, where the economic burden is high and is impacting productivity, as well as healthcare costs for employers and employees. It has been shown that the high cost of NCD management requires investment, but Kenya has not been able to afford to meet the cost at the government level, which may contribute to high mortality rates and increased numbers of admissions of NCDs due to high morbidity. It is in Kenya's interest to mitigate the rise of NCD incidence through prevention. This study has shown that there is awareness of the burden of NCDs among the population, so creating awareness about preventive measures should be a priority to minimize risk and morbidity among employees in the workplace.

Literature has shown that the workplace has a key population that is accessible for preventive measures. The Kenya government has discussed the importance of health promotion and disease prevention through various documents like the Vision 2023, The Kenya National Strategy for the Prevention of and Control of Non-communicable Diseases 2021-2026 and the Kenya Health Policy, which gives overarching policies and guidelines for implementation across various sectors in Kenya. However, implementation of these policies has been slow to

reach the workplace, and research has shown the importance of leveraging health promotion sites like workplaces for prevention actions.

The Kenya Directorate of Occupational Health and Safety is the organ responsible for health and well-being implementation in the workplace. However, most of the focus has been on workplace safety and the prevention of injuries. It is therefore recommended that the directorate engage with the workplace and collaborate with the healthcare sector to come up with an implementation plan that can give guidance to employers regarding health and well-being programmes in the workplace. The other issue is that the OSHA ACT 2007 does not make provisions directed at health and well-being implementation but is very specific about safety and prevention of occupational-related accidents. There is a need to review the OSHA ACT 2007 given the current understanding regarding the importance of workplaces in health and well-being promotion and disease promotion. However, change of legislation is a long-term action, so it is recommended that the directorate develop policies within its jurisdiction and sensitisation mechanisms to engage employers and employees in the implementation of health and well-being promotion.

One of the responsibilities of the OSHA directorate is to ensure workplaces are adhering to the implementation of occupational health directives. The Directorate has existing evaluation frameworks that can be extended to accommodate the evaluation of health and well-being in the workplace and implantation outputs, information that can be very useful for future research in this area. In the Ministry of Health, the department tasked with matters of health promotion and disease prevention is the Health Promotion Unit in the Public Health Department. Health promotion succeeds where there is collaboration and inclusiveness. As employers have a key role in successful health and well-being programmes in the workplace, it is recommended that the Health Promotion Unit and the Directorate of Occupation Health

and Safety have dialogues about employers and their role in health promotion and disease prevention through the Federation of Kenya Employers.

Conclusion

In this chapter, an overall summary of the study was presented with reference to the preceding chapters. Key findings of the study were discussed as reflected by the themes generated from this study. Empirical implications of this study were discussed, and practical implications were also discussed in line with nursing practice, workplace health and well-being promotion practice and research. Contributions of this study were presented, and recommendations were made for future health promotion research, nursing practice and policy, government agencies and employers. Limitations of the study are also discussed in the final part of this chapter. The next chapter will discuss the dissemination of the study findings, reflections on my PHD experience, and the impact of the COVID-19 pandemic.

CHAPTER SEVEN

SUMMARY AND CONCLUSIONS

Introduction

This chapter summarises the study with regard to the motivation for this study, the gaps that were addressed in the study, the key findings of this study and the significant contribution arising from this study. The process of dissemination and personal reflection of my experience through this PHD journey are included, and finally, the impact of the COVID-19 pandemic on workplace health and well-being is highlighted.

Today, the workplace is considered a critical setting for health promotion and disease prevention, where a focal population can be reached to inculcate a culture of a healthy lifestyle. This study was influenced by the current health and well-being status of the Kenyan population, especially the rising burden of NCDs, which is a big concern. Kenya is currently experiencing an increase in chronic disease burden, with NCD incidence set to increase by 27% in 2030. Currently, NCDs account for 50% of patient admissions and 55% of hospital deaths in Kenya (Ammoun et al., 2022; MOH, 2021) and 39% of overall deaths in Kenya. The economic impact on households is catastrophic as currently, 28% of family income goes to funding management of NCDs either for individual or extended family members resulting in households contributing to 39% of overall national health expenditure from their income. The Kenya government in keeping with UN- SDG 3.4 plans to reduce NCD-related deaths by 1/3 through the promotion of health and well-being with an emphasis on involving non-health actors in health promotion and prevention like employers and employees in workplace sites.

Although nurses are the largest cadre of health care workers in Kenya, their presence in the workplace is not felt despite the workplace well population being identified as a suitable group to access for health promotion and prevention. Nurses are also critical first responders

in primary healthcare settings and should be available to address the health and well-being needs of employers and employees in the workplace. However, there is limited research that addresses the role nurses in the Kenyan workplace do to enhance primary health care in workplace sites. This study therefore allowed me to interrogate nursing in the workplace health context and understand the potential that exists for nurses to enhance the health and wellbeing of employers and employees in the workplace sites across Kenya.

The literature review showed that there is little research seeking to understand lay concepts of health among lay persons in the Kenyan workplace context and how this impacts health behaviour. The literature review also showed that there is limited empirical research on workplace health and well-being in Kenya and the role organisations play in NCD prevention. The other gap identified from the literature review showed that research on NCDs in Kenya is mainly about the burden of disease and secondary prevention post-diagnosis. There is little research addressing primary prevention in community settings such as workplaces, and where research is done, only specific diseases like hypertension are addressed. This study, therefore, sought to 1) Explore employer and employee perception of health and well-being concepts.2) To explore employer and employee perception of how health and well-being impact workers in the organisation, and 3) To explore employer and employee perception of how an organisation can improve health and well-being in the workplace.

Summary of key findings

Perceptions of health and well-being in the workplace

From the findings of this study, health and well-being were perceived to be multifaceted and centred on individuals' knowledge, beliefs, culture, and interactions with others. Health and well-being were conceptualised around lifestyle practices, ease of illness, and productivity at work. Employers and employees did not seem to perceive health and well-being as separate

concepts but generally utilised health as an overarching concept of health and well-being. The knowledge about lay conceptualisation of health and well-being will enable health promoters to employ contextually appropriate approaches to health promotion, designed with the understanding of employer and employee perceptions instead of those based purely on medical perspectives. Awareness about lifestyle diseases was expressed as employers and employees showed awareness about the importance of living a healthy lifestyle not from a scientific basis but from their opinions within the context of their social environment and workplace context as well as culture and beliefs.

Perceptions of how organisation impacts health and well-being in the workplace.

The role of peers in role modelling living a healthy lifestyle is key to influencing behaviours, and interconnections between individuals can be useful in establishing healthy behaviours and giving knowledge and information. Peer influence on employee health behaviour improves participation in health and well-being activities, which is a predictor of better health outcomes. Peer influence had an impact on employee's perception of the need to maintain a healthy diet and regular exercise for the prevention of disease. Peers were useful in enhancing a culture of health and well-being in the workplace, which resulted in the identification of health champions among the group. The workplace setting was perceived as suitable for networking and ensuring continuity of healthy behaviours in the workplace, which contributed to the overall culture of healthy lifestyles among workers.

Health information was key in ensuring that healthy lifestyle conversations were sustained in the workplace. Health information was freely shared among employees, especially through social media. The use of the internet and social media platforms plays a big role in influencing perceptions of health and well-being, especially when experts in health fields are not available to provide information or clarify existing knowledge. Employees perceived the

importance of gauging whether the information given was accurate or biased and raised this as an ongoing concern. Sharing positive information is effective, whether it is through social media or interactive social group conversations, and it can be more persuasive in effecting behaviour change. Peers and role models were the grassroots health champions who played an important role in health promotion to ensure employees took ownership and were in charge of their own individual and collective health and well-being enhancement in the workplace.

Perceptions of how organisations enhance health and well-being in the workplace.

Employees expect employers to assist in the cost of disease burden, especially through paying for health insurance and allowing sick days with pay. Employees also perceive that employers should provide health and well-being amenities like space to exercise and food where healthy food is available. Employees felt that time is important for them to participate in health and well-being activities like gyms or walking sessions and would benefit from protected time given by employers for participation.

Employers are concerned about the impact of worker productivity and illness. Employers are positive and willing to implement workplace health and well-being initiatives but lack guidance on implementing evidence-based sustainable programmes. Employers are concerned about the cost of healthcare services as they expect employees to cover their healthcare costs through health insurance. Other ways to increase costs are through absenteeism and presenteeism, where the organisation has to pay for the time an employee is out of work due to illness. In this regard, employers are keen to engage in health promotion and prevention programmes as they see benefits in reduced employee illness-related costs. However, Kenya-related studies regarding employee absenteeism due to ill health are lacking to give guidance.

Employers have partnered with health insurance companies to offer health promotion opportunities like health days, but most activities are around promoting insurance products rather than prevention of disease. There is little interaction between the healthcare system and the population in the workplace setting for health promotion opportunities. Lack of health system influence means that there is little being done to address determinants of workplace health and well-being, with acute care services being prioritized instead of engaging in the workplace space for health promotion and disease prevention. Integration of the healthcare system with workplaces is necessary for access to healthy populations if health promotion and prevention of NCDs will be achieved.

The unique contribution of the study to knowledge and health promotion practice

This study has uncovered new knowledge regarding the current status of health and well-being in the Kenyan workplace environment, the perceptions of the employer community, and existing organizational health and well-being needs.

New knowledge regarding lay concepts of health and well-being has highlighted the multifaceted aspects of workplace health and well-being constructs that are significant for future holistic design in health promotion.

These constructs of health and well-being among employers and employees have been summarized in a concept model that will be useful to inform future health and well-being research and design of workplace-based health promotion and disease prevention.

The study added new knowledge to nursing research in the workplace health and well-being practice science. The findings of this study offer areas of further research in the implementation of health and well-being interventions that are relevant for the workplace context and identified determinants of workplace well-being, including individual health and well-being behaviours; Peer role in enhancing healthy lifestyles at work, organisational role

in resource mobilisation for health and well-being and the dynamic, multifaceted conceptualisation of health and well-being among employers and employees.

The finding of this study also identified that there is a gap in the facilitation and guidance of workers in Kenya to enrich current steps taken in organisations to enhance their health and well-being. The study showed the possibilities that the workplace setting offers in the national NCD prevention effort and the role nurses can play in the healthy populations within PHC in Kenya.

A conceptual model was developed and is proposed for future design and evaluation of integrated KRCHN practice for the enhancement of workplace health and well-being. New knowledge on the model for creating a platform for nurses' role in workplace health and well-being practice space in Kenya is proposed. The conceptual model provides a novel concept that can be utilised for further research on the role of KRCN in workplace health and well-being and the future impact on health and well-being outcomes for employees.

There is potential for the successful rollout of KRCHN to be involved in the workplace to establish sustainable health promotion and prevention programs that give a holistic approach to NCD prevention. Workplaces especially in urban areas and towns are situated close to primary health centers which makes it easier for nurses to adopt these workplaces for health promotion activities. The advantages of such networks between nurses and the workplace can result in reduced incidences of presentism and absenteeism due to increased access to healthcare workers and early diagnosis and health intervention. The other benefit would be successful follow-up of patients with NCDs who are in employment and accurate data management about the prevalence and NCD trends among Kenyans in formal employment.

Research dissemination process

Research knowledge transfer is an active or planned process of sharing research outcomes with relevant stakeholders or targeted audiences. Widespread dissemination of research outcomes paves the way for the translation of research results into action and allows diverse audiences to interrogate the study in line with relevance, usefulness and quality. There is growing interest in the potential that disseminating research findings has on industry, practice, business, and government in improving the health and well-being outcomes of our populations. This necessitates deliberate thinking about the process that is most suitable for the dissemination of study findings.

In Kenya and other parts of Africa, there is a great need to maximise research to improve practice in healthcare settings, communities and government through effective implementation of evidence-based decision-making and cost-effective solutions that directly or indirectly address health needs. In the case of this study, NCD prevention among Kenyans is achieved through workplace health and well-being promotion. There are many approaches utilised in the attempt to narrow the theory-practice gap, and researchers use various theoretical approaches for research dissemination (Wilson et al., 2010).

For dissemination to be targeted, the findings must be focused or tailored to a particular need or solution for a specific audience. Disseminating research findings enables interactions between researchers and research users in an environment where barriers to knowledge translations have been minimised through a multifaceted approach to interventions (Chapman et al., 2021).

This study has covered two areas of interest: workplace health and well-being promotion and prevention of NCDs in Kenya. Dissemination of this study's findings will aim to inform and create awareness among professionals in health promotion and disease prevention about the

current status of health and well-being in the workplace and areas we can leverage on prevention of NCDS by utilising populations in the workplace sites. Through dissemination, I also aim to sensitise the policymakers from government agencies and the employer community regarding gaps in workplace health promotion OSHA policy and create awareness about how findings of this study can form a basis for reform in workplaces regarding health and well-being and collaboration opportunities that exist with health promotion experts and community health nurses.

The key stakeholders of interest in the dissemination of findings include Professional colleagues – Community health nurses are first responders in the community and link community members to the health system, medical doctors, and occupational health specialists; Public health promotion experts and academics play an important role in designing and implementing of promotive and preventive interventions by utilising research and therefore are utilisers of the findings of this study.

Policymakers - The Directorate of Occupational Health and Safety and the health promotion unit in the Ministry of Health are responsible for policy development and implementation of national laws and guidelines pertaining to occupational health and safety in Kenya. Other stakeholders include non-governmental and private institutions, professional bodies like the Nursing Council of Kenya, employers and employees who are interested in the promotion of health and well-being in the workplace, and non-profit organisations involved in occupational health.

For effective dissemination of study findings, multiple ways will be utilised to ensure stakeholders are reached with information within their capacity to absorb and utilise. Dissemination modes planned include presentations at various arenas, including international and national conferences related to health promotion and NCDS prevention, professional

meetings, and seminars through reports, oral or poster presentations and other media that may be available. So far, I have presented at one international conference in March 2022 at the International Union for Health Promotion and Education Health in Montreal, Canada (See Appendix 8). I am also due to present findings at the Africa Interdisciplinary Health Conference in August 2023 in Nairobi, Kenya. Other dissemination plans include publications in various relevant health promotion and peer-reviewed community health-related journals like the International Journal of Qualitative Studies on Health and Well-being and Research in Nursing and Health Journal. Dissemination will also be done through seminars with policymakers like nursing professional bodies, Occupational health, and health promotion experts to deliberate on integrated workplace health promotion opportunities.

Reflection of the Ph.D. Experience

My PhD experience represents a major life milestone in my long career in nursing and midwifery. I spent many years in clinical practice settings and came into academia later in my career as I felt I had made an impact in practice and wanted to utilise the experience I had gained to impact new nurses as they joined the university to start their careers. I also felt it was a good time to engage in research and contribute to transforming the research landscape here in Kenya, which is still young and developing exponentially. I reflect on the main aspects of learning that I have had over the PhD process, the challenges I had to navigate at different stages of my study, and my future aspiration in the health promotion and disease prevention research space. Through this study, I have learned a lot and gained an in-depth understanding of the context of workplace health and well-being promotion. My educational and practice background also became useful, as well as my knowledge about community engagement, which helped me navigate through various stages of the research process.

This was the first time I had carried out a qualitative study of this scale, so my initial reactions were that it was going to be a challenge as I felt that reading about research is one

thing, but doing actual research is not straightforward and one needs to be ready for any eventualities. Through this journey, I have learned that PhD is not just about undertaking a major research project, but it is a learning curve through which one transitions into a researcher and constructs their research identity. I have also learned that although the research process is often defined as a linear process with pre-determined steps and phases, the journey is far from it. PhD research was a journey and not a one-off project or single event in my career.

As I have discussed in the previous chapter, there are not many studies done on workplace health promotion within nursing research, so I did not have a lot to go by in terms of finding someone who could share their experiences with research in this area. So, my conversations with peers were more about qualitative research and PhD journey than specifics about workplace health promotion. Although this seemed to be a disadvantage, it became useful in ensuring I had a fresh eye with fewer biases that may have arisen if I had received information about doing health promotion research based on the workplace. I have also created a newspaper for nursing research that had not been focused on previously and have been able to generate new knowledge for both health promotion practice and nursing research.

Being a novice researcher, I underestimated what it takes to get through this journey, only to realise that my PhD studies would not fit around my daily schedule, and I would have to reorganise my life around my studies, especially since I am working and have family responsibilities as well. Navigating this journey has made me more focused and organised, and I realise that it is not just for now, but this is my future as I continue in full-time academic and research work. So, my PhD journey has not only given me experience in doing research but has shaped me to become research-oriented and given me the ability to organise my life around research practice.

My research study has changed with time, and as I look back at where I started, I see that the entire study has grown in an entirely new direction compared to what I envisaged when I started. I remember my supervisors telling me that as I gained more experience and went through the journey, my studies would change, but at that time, I did not understand what they meant. Now, I have changed many aspects of my study and gained a better understanding of the research process; I am able to make changes as the research takes on its own form, away from my earlier assumptions. For instance, my methodology changed from what I had previously envisaged as I gained an understanding of various qualitative methods and their rationale. Engagement with my supervisors and peers and reading on the subject all contributed to my ability to understand and make sound decisions about what methods were suitable and why. I learned the importance of spending time thinking critically about every step you make in the research process and being able to support it. My critical thinking skills in research have definitely been greatly enhanced through this journey.

One of the memorable aspects of my journey was when I embarked on recruiting organisations to allow me to interview employees. I had hoped that I would get more organisations willing to participate since this study would give them an opportunity for future improvement of their health and well-being. However, many employers thought that I might be just coming to find out if they were adhering to OSHA regulations and might report them. This meant that I took a long time to go back and forth, do a lot of reassuring and create rapport to gain trust among employers. With persistence, I was finally able to break through, and the experience gave me resilience skills.

Through the interviews, I gained rich information and a whole new outlook on employees' and employers' perceptions of health and well-being. I did not have much exposure to interviewing, so this PhD journey has seen me grow and gain confidence in interviewing- a skill that will only grow more in the future.

From this study and interactions with participants, I have become aware of how we, as nurses, have not paid any attention to people who are in the working space daily. I will call them the working well population for now. These people are focused on serving Kenyans and rarely have time to go to the hospital for checkups unless they have symptoms. Most of the time, when we nurses are in the community doing health awareness campaigns, we rarely include people who are in workplaces like offices. Most of our campaigns are during office hours and on weekdays, so the working Kenya has no access to any information or an opportunity to get a free check-up at a mall or a free check during a health campaign. While I was collecting data, I met with food vendors selling food to workers, hawkers standing by the workplace gates to sell their wares to workers during their breaks, and even insurance salespeople, but I never found a healthcare worker engaging employees in their workplaces as we tend to wait for them to seek care in our health centres. So, this was an eye-opener for me as a healthcare worker and a nursing academic, as I wanted to engage further with employees in their workplaces in the future.

Through my research journey, I have gained resilience and have not given up despite the many challenges I experienced in my social life, which made my research journey slow and exceedingly difficult. However, through great support and understanding from my supervisors, my employer, peers and family, for whom I am forever grateful, I was able to push on instead of giving up. The negative moments of this journey were not able to destroy my passion and desire to contribute to society and nursing academia, and I hope that the findings of this study will go a long way in changing the health and well-being of the working population in Kenya.

COVID 19 pandemic and impact on future workplace health and well-being

This study was already in progress when the COVID-19 crisis began. However, the impact the COVID-19 crisis has had on the workplace and working populations is significant.

In Kenya, COVID-19 was recognised as an emergency in March 2020, and the country went into Lockdown up till September when a few restrictions were eased and curfew hours reduced. According to the Ministry of Health in Kenya, by July 2020, it was noted that the majority of COVID-19 patients who died had underlying NCD conditions. Since then, the Ministry of Health has increased efforts to reverse NCDs in conjunction with county governments.

Preventive lockdowns were instituted globally and caused a lot of disruption to employees when non-essential businesses instituted mandatory working from home. The workplace has since been transformed and this has impacted the health and well-being of workers in many ways.

One of the issues that arose with working from home was equity because workspaces at home are not standardised. This arrangement created problems for some while others benefited, with vulnerable workers, women, and low-income earners being the most affected (Kniffin et al., 2021). For instance, there was no time to prepare for work-from-home policy directives, so most employees had to find a space to work in with little consideration of suitability and convenience for work. Mongey & Weinberg (2020) noted that most low-level workers seemed to have been more stressed by working from home as they had to cover their workload while at the same time engaging in child rearing, homeschooling for the same hours that had previously been dedicated solely for work productivity. Conversely, other employees, mostly from higher-level employment, felt that working from home was beneficial because they were able to reduce their long commute to and from work, had more time with their families and were less stressed (Mongey & Weinberg, 2020).

The other issue that may be impacting the health and well-being of the working population is the loss of livelihood. This is especially difficult for those employees who probably benefit from reduced risk of disease due to enhanced workplace well-being and perks like health

insurance coverage and amenities. As COVID-19 took its toll on businesses, economic losses meant reduced global economic activity. Minimised movement in Kenya and around the world heavily impacted the tourist industry in Kenya, which is a key employer and a major foreign earner. The hotel industry also suffered a heavy impact from COVID-19 mitigation measures, and many workers were laid off. The Kenya National Bureau of Statistics estimates that 1.7 million Kenyans have lost their jobs (Wangari et al., 2021).

According to Reuschke & Felstead (2020), because WFH was enforced to cater for evolving emergencies, it would be beneficial to investigate the impact this has on the mental health and productivity of workers. The other change that happened in the work environment was a redefinition of work, leading to a combination of roles, redundancies, and salary reduction, all of which have impacted employees' sense of belonging, stability, and career planning, among others but some workers were impacted more than others (Joyce, 2020). The impact of the disruption has already been seen with higher incidences of domestic violence, mental health issues including stress, and high economic burden for families, stressing the importance of addressing critical mental health aspects linked to the workplace environment (Giorgi, 2020). Workplace well-being has taken on a new meaning as the integration of work and home becomes part of our work life, and new strategies, policies, and direction will be required going forward.

The COVID-19 pandemic is no longer an emergency, and workplaces are slowly coming back to normalcy with reduced working from home. Some employees have moved to new workplaces, new localities, new remuneration packages and a different environment than the one they were used to before the pandemic. This new normal provides the opportunity for further research to find out how employers and employees have made adjustments in their work environments and how the pandemic impacted their perceptions about health and well-being compared to before the pandemic.

Conclusion

This chapter summarised the study with regard to motivation, the gaps that were addressed, the key findings of this study, and the significant contribution arising from this study. The process of dissemination and personal reflection of my experience through this PhD journey are included.

The benefit of utilising workplace sites for future health and well-being promotion and disease prevention is likely to have a ripple effect and impact on individuals, families, and communities. The involvement of all stakeholders, including employees themselves, will ensure a sense of ownership and achievement as they already share the same concerns about their health even without the data projections and scientific information that we have as healthcare workers. I hope that this study's findings will give rise to more research and engagement with workplaces to achieve optimum health and well-being. The KRCHN has an opportunity to utilise the potential that workplaces offer to make inroads in health promotion and prevention within the PHC level of health care.

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APPENDICES

Appendix 1: Participant information sheet

Title of study: Employers' and Employees' perceptions regarding the promotion of health and well-being in the workplace.

Name of Researcher: ISABEL KAMBO

Invitation paragraph

My name is Isabel Kambo. I work at the Aga Khan University, Nairobi and am currently a postgraduate student at The University of Salford (UK). I wish to invite you to take part in this research. Before you decide to participate, I have shared further information in this document about why we are doing this study and how you will be involved in the study. Take time to read the information and ask questions or clarification where necessary. Participants are required to have been employed for at least one year in any capacity, either as an employer or an employee. Take time to decide whether you want to take part in this study, which will involve taking part in an interview session.

What is the purpose of the study?

Through this study, I want to gain an understanding of the perception of health and well-being in the workplace where people are working.

Why have I been invited to take part?

You have been selected because, as an employee and a member of a community, you have unique first-hand information that you can share about health and well-being in the workplace. Your thoughts will help shed light on the true picture of health and the perspectives of employers and employees in the workplace.

Do I have to take part?

Taking part is voluntary. You will be provided with information to help you understand your role in this study, and you are free to ask questions that arise. Once you have

decided to participate, you will be requested to sign a written consent form to show that you have been permitted to participate. You are also free to withdraw from the study at any time without giving any reasons, and there will be no consequences. The study has a timeline, so participants will be required to withdraw within three months after data collection. Once the research report has been taken for publication, it will not be possible to withdraw interview data.

What will happen to me if I take part?

You will be required to take part in an individual interview session. I will take you through an interview that will take about 60 minutes. I will give you a brief explanation about the study and clarify any questions you have before you give consent once you give consent. We will agree with you about the venue, date and time when it is convenient for you to do the interview. After the first interview, I may want to talk to you again to seek further information on points that may need clarification or further elaboration.

You will be asked a series of questions which have been prepared. You will be allowed to refrain from answering questions if you do not wish to. There will be no other persons present in the interview except you and the interviewer. I wish to record the interview- this will help me to concentrate and be able to respond to your conversation. Recording will also help me capture your views as you have said them. I may make brief notes during the interview if necessary. If you have information you do not want to record, kindly ask the interviewer to stop recording that part of the session.

Expenses and payments?

You will not be required to pay to participate in this research. Expenses used for your transport to travel to the agreed interview venue will be reimbursed.

What are the possible disadvantages and risks of taking part?

There are no anticipated risks in taking part in this research. However, if anything is distressing or of concern, kindly report it. Psychological support through a counsellor may be given if your participation in the interview causes any undue distress.

What are the possible benefits of taking part?

There may be no direct benefits for participating in the interview. However, your contribution will give important information that may help health workers and health managers' understanding of health and well-being in the workplace.

What if there is a problem?

In case you have a concern regarding this study, feel free to seek further clarification from the researcher through this contact:

Isabel Kambo - Tel +254720920426
email I.Kambo@edu.salford.ac.uk
If you need to inquire further, you may contact the research supervisor:
Dr. Michelle Howarth by email m.l.howarth2@salford.ac.uk
or by telephone +44 (0) 161 295 2873
If the matter is still not resolved, please forward your concerns to:

Professor Susan McAndrew, Chair of the Health Research Ethical Approval Panel, Room MS1.91, Mary Seacole Building, Frederick Road Campus, University of Salford, Salford, M6 6PU. Tel: 0161 295 2278. E: s.mcandrew@salford.ac.uk'

Will my taking part in the study be kept confidential?

All information you share in this study will be kept strictly confidential. Any personal information shared outside this project will have your name and address removed, so you are not recognised. Documents pertaining to your data, like interview sheets, will be anonymised, and a code known only to the researcher will be given. Any information stored in electronic format, like the participants' master list, will be password-protected on a computer used only by the researcher. Recordings and interview scripts will be kept in a locked cupboard within a

locked office to which only the researcher has access. Your data will only be accessible to authorised persons like the researcher, supervisors and research regulating authorities. Data will be retained for a minimum of three years after the researcher has handed in the completed report.

What will happen if I don't carry on with the study?

You are free to withdraw from the study with no due consequences. Once you withdraw, your personal details will be removed from the master list, your data will be removed from the study documents, and your recordings will be destroyed. The study has a timeline, so participants will be required to withdraw within three months after data collection. Once the research report has been taken for publication, it will not be possible to withdraw interview data.

What will happen to the results of the research study?

The results of the study will be published in research journals and presented at conferences, professional workshops, or newspapers. However, these will not disclose names or personal details of participants unless they have given consent.

Who is organising or sponsoring the research?

This research is being organised by the researcher as a postgraduate student at The University of Salford UK. The researcher has not yet received any sponsorship for the study.

Further information and contact details:

Researcher: Isabel Kambo
Tel: +254720920426
email I.Kambo@edu.salford.ac.uk

For psychological support contact

Mrs Mary Gitau
Counsellor
Tel +254722753473/731888066

Appendix 2: Consent form

Title of study: Employers' and Employees' perceptions regarding the promotion of health and well-being in the workplace

Name of Researcher: Isabel Kambo

Please complete and sign this form **after** you have read and understood the study information sheet. Read the following statements and select 'Yes' or 'No' in the box on the right-hand side.

Yes/No Date

1. I confirm that I have read and understand the study information sheet Version 3, dated ***18/06/18***, for the above study.
   I have had the opportunity to consider the information and to ask questions which have been answered satisfactorily.

Yes/No Date

2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, and without my rights being affected.

Yes/No

3. If I do decide to withdraw, I understand that the information I have given, up to the point of withdrawal, will be destroyed. The timeframe for withdrawal is one month after the interview.

Yes/No

4. I agree to participate by being interviewed, which will be audio-recorded

Yes/No

5. I understand that my personal details will be kept confidential and will

not be revealed to people outside the research team, except if the researcher identifies serious risk of health and safety dangers to either the participant or other individual or serious crime which will have to be reported to relevant authorities. Yes/No

6. I understand that my anonymized data will be used in, for example, the researcher's dissertation, other academic publications, conferences/presentations, and further research and that data may be kept for use by other researchers looking at a related topic Yes/No

7. I agree to take part in the study:

_____	_____	_____
Name of participant	**Date**	**Signature**
_____	_____	
_____		
Name of person taking consent	**Date**	**Signature**

Appendix 3: Interview guide

Research topic	**Employers' and employees' perceptions regarding the promotion of health and well-being in the workplace.**
Research question	What are the perspectives of employers and employees regarding health and well-being in the workplace context?

Questions:

1. What does health and well-being mean to you?

   Could you tell me more about it?

   What makes you feel that way?

2. What do you think your organisation can do to influence the health of Workers?

   What motivated your response?

   Could you elaborate more?

3. What are your thoughts about the impact employees have on workplace health and well-being?

   Why is this important to you?

   What is the significance of this?

4. What resources would help improve health and well-being in the workplace?

   Is there an example you can think of?

   Tell me more about this.

This is the end of the interview. Do you have any questions or clarification?

Thank you for your participation and responses.

Appendix 4: Sample interview transcript

DV_EME_003

I: **GOOD AFTERNOON**

P: Good afternoon to you

P: Okay

I: **SO, I WANTED TO ASK YOU THE FIRST QUESTION HOW WHAT HEALTH AND WELL-BEING MEAN TO YOU**

P: To me, it means living a healthy life, maybe exercising and using the right diet.

I: **MAYBE YOU CAN ELABORATE SOME MORE ABOUT THAT.**

P: Probably going to the gym or walking, yeah.

I: **SO, DO YOU DO EXERCISE OR GO TO THE GYM ANY OF THAT?**

P: No, okay, maybe once in a while. Maybe sometimes I go, and then I drop the ball at some point. Yeah.

I: **DO YOU KNOW WHY THAT HAPPENS?**

P: Sometimes it's like it's too much on time; time is a real issue because mostly when you are a working person, you have to leave early to get to work early; when you leave work, you get home late, and it's probably if you are a family person then you cannot start leaving your family to go and do gym, you don't have that time.

I: **AND WHAT ABOUT DIET MAYBE YOU CAN ELABORATE MORE ABOUT DIET?**

P: Diet okay. I think it's more of what we are used to eating versus what is happening with the current trend because we grew up eating without caring about what we are

eating, so the change of that mindset to be told now don't eat wheat, don't eat whatever and that is what your taste birds are used to it's very hard to stop then again sometimes when you are in the workplace, it's difficult sometimes to get what you want, yeah.

P: A healthy diet is a balanced diet, yeah, a balanced diet, and of course, from what people have been discussing now, there is the portion issue. Yeah.

I**: OKAY, LIKE IF WE SAID THE FOODS, WHAT EXAMPLE OF THE FOODS WOULD YOU GIVE?**

P: Like if I am eating rice with Sukuma wiki and meat, for example, the healthy diet would be maybe two scoops of greens, maybe a piece of chicken and a spoon of rice.

I: **AND WHAT ARE YOUR VIEWS ABOUT THAT?**

P: (Laughs) I feel like it's very limiting, yeah, it limits, like now what I was saying I am used to, and then also when you think about it more, the things that you are being told to avoid are the once that are affordable like greens are not that cheap like if want to go and buy two plates of greens so that you don't eat carbohydrates you spend more like if I bought ugali fifty bob if I want to buy greens I will buy at a hundred. So, you definitely don't have the money to keep up with that phase.

I: **AND WHEN YOU SAY FOODS THAT YOU GREW UP WITH, LIKE WHAT EXAMPLES WHAT TYPE OF FOODS**

P: Ugali, Githeri, Chapati at times once in a while, and rice and, for example, from my side and bananas, mukimo or matoke, yeah.

I: **SO MUKIMO, MATOKE, ARE THEY UNHEALTHY IF YOU EAT**

P: If you eat, when you were eating in those days, you were eating matoke, in fact, you just do waru with bananas, and that is total carbohydrates, and you eat nowadays you cannot do that on a plate everybody will be screaming at you.

P: It is just people think you are eating unhealthily when they see your plate has a lot of carbohydrates, yeah

I: **ARE THEY LIKELY TO TELL YOU**

P: Yeah, nowadays it's very open, so everyone will tell you

I: **AND HOW DO YOU FEEL ABOUT THAT**

P: Sometimes, you justify yourself. After all, what I mean is I don't see any change whether I eat or I don't eat, yeah life is short (laughs)

P: Of course, there are those days that you feel challenged, but you try. You can try for about a week, but you eat very little, or you may meet your portion, and then, probably along the way, you don't see any change in your body. You go back, yeah.

P: Someone who is healthy is a person who, first of all, they exercise and watch what they eat, so they avoid fried stuff.

I: **SO THAT IS LIKE BEHAVIOUR, AND WHAT ABOUT SOMEONE WHO IS NOT HEALTHY?**

P: Someone who is not healthy is the opposite. They never do anything about it. They eat whatever they find, and of course, you can also tell from the body size sometimes if somebody is struggling to climb the stairs. Yeah.

I: **WHAT ARE YOUR THOUGHTS ABOUT WORKERS INFLUENCING HEALTH AND WELL-BEING IN THE WORKPLACE?**

P: Like in our workplace, it is something that we keep, like, say, discussing dropping the ball along the way. There were times we engaged a sports club nearby, and the company had even gone ahead and negotiated so that we get subsidized rates, and the members actually joined a club, and we did that for like a year. However, still, because I think of this issue, I was talking about time some members will never go there. You are paying, so it will appear that it is not giving the results that were expected, so of course, we withdrew from that. Still, in terms of colleagues, we would join a WhatsApp group and motivate each other, maybe on Saturday, to go and run. People go once in a while, not all of them, but I think it's something that is clear to people in the organization.

I: **AND IN YOUR DAY-TO-DAY INTERACTIONS, ARE THERE WAYS YOU INFLUENCE EACH OTHER**?

P: Yeah, like I am saying, if my friend finds me with a plate of chips, they always scream, okay, I will eat. You know I will not also want to do that next time, so I will manage the time between when I eat chips. Yeah.

I: **ALL RIGHT, YOU MENTIONED GETTING SOMEWHERE WHERE YOU ARE GETTING SUBSIDIZED RATES. WHAT ARE THE OTHER WAYS THE ORGANIZATION CAN HELP TO IMPROVE HEALTH AND WELL-BEING IN THE WORKPLACE**?

P: Okay, in terms of the diet, probably get okay like in terms of the diet is about where we don't really have catering services, so sometimes if you don't carry food from home, you probably have to eat junk, or you get food there is another caterer who brings, but maybe

we don't like their food. So, yeah, maybe you can improve on the catering services that we get; maybe think of something.

I**: ALL RIGHT, WHAT ABOUT OTHER ISSUES OF HEALTH AND WELL-BEING OTHER THAN DIET AND EXERCISE; ARE THERE OTHERS?**

P: I think the other thing is that if we are talking about awareness, the company does that because there are people who even come and talk to us. Some people come and test our BMI and our body fats, so like every year, you already know where you are. So, in terms of awareness, I think the company has done its work.

I: **SO ONCE OR WHEN YOU KNOW WHAT YOUR BMI IS, WHAT DO YOU DO?**

P: Of course, you start making resolutions that you will change, and then you find you haven't changed (laughs). Yeah, but I think when you are aware, its good only that sometimes you don't take action.

I: **WHO ARE THE PEOPLE WHO DO THE TESTS**

P: There is some insurance, okay. The insurance contacts some medical practitioners, yeah, and they come on-site and do the tests.

I: **AND THEN DO THEY COME BACK AND SAY WHAT TO DO ABOUT THE**

P: Yes. If you had an issue, they would advise you. If it's a nutrition issue, they will tell you and even give you the, what a menu would look like for you, yeah.

I: **OKAY, AND THE RESOURCES, WHAT DO YOU THINK ARE THE RESOURCES THAT HELP TO ENHANCE HEALTH AND WELL-BEING IN THE WORKPLACE?**

P: Maybe equipment like

I: **LIKE WHICH ONES**

P: Like okay, first of all, even the space to do the exercise, for example, and maybe there could be gym equipment in the space, so then people, it's more convenient, yeah. If the resources were availed nearer to you, then if you know you are leaving work at five, you can decide to do thirty minutes before you go home because you know there is even if there is traffic or jam whatever in Nairobi or that at least you can even do that and go home but if you say you leave here to go home first and then you

I: **THEN GO LOOK FOR GYM**

P: And, of course, when there are people together, there is motivation, than when you are alone.

I: **TELL ME MORE ABOUT THAT MOTIVATION**

P: As in, like if we had a gym, I feel like if there was a gym space here with equipment, people can tell each other, let's be going for the gym like thirty minutes, and because you also want to participate, you will go but if everyone is told you just go and find your own gym I mean, so there is that thing of togetherness makes people move.

I: **ALL RIGHT, ANYTHING ELSE YOU WOULD LIKE TO HAVE REGARDING YOUR VIEWS AND REASONS BEFORE WE STOP?**

P: No, I wouldn't. It's only that sometimes, it's too much nowadays on the food issue until it's not clear whether actually what we are eating is all unhealthy or people make it up.

I: **SO, LIKE, HOW DO PEOPLE COMMUNICATE?**

P: You know, like everything we eat, in fact, even if you say you are avoiding, like, for example, the carbohydrates and you say you want now then to eat fruits, you will be told fruits have sugar, so you are wondering even the fruits, don't eat fruits don't eat so much mango they have sugar so as what are you supposed to eat, yeah. I think it has become too much again, yeah.

I: **WHERE DOES THE INFORMATION COME FROM**?

P: From all source's social media, I don't know if you get information

I: **SO, IF YOU GOT INFORMATION THAT IS FROM A SOURCE THAT IS**

P: Yeah, a reliable source. If you eat these three types of fruits, then it is not healthy to eat that type of fruit.

I: **SO, WHAT WOULD YOU CONSIDER A RELIABLE SOURCE OF INFORMATION?**

P: Like people who have been trained in nutrition, yeah.

I: **OKAY LIKE AN OFFICIAL CERTIFIED NUTRITIONIST?**

P: Yeah

I: **OKAY, ANYTHING ELSE?**

P: No

I: **SO, WE WILL END HERE. THANK YOU SO MUCH.**

P: Thank you, too.

Appendix 5: Ethics approval University of Salford

Research, Enterprise and Engageme
Ethical Approval Panel

Doctoral & Research Support
Research and Knowledge Exchange,
Room 827, Maxwell Building,
University of Salford,
Manchester
M5 4WT

T +44(0)161 295 2280

www.salford.ac.uk

9 July 2018

Dear Isabel,

RE: ETHICS APPLICATION–HSR1718-067 – 'Employers' and employees' perceptions regarding the promotion of health and well-being in the workplace.'

Based on the information that you have provided, I am pleased to inform you that the ethics application HSR1718-067 has been approved.

If there are any changes to the project and/or its methodology, then please inform the Panel as soon as possible by contacting Health-ResearchEthics@salford.ac.uk

Yours sincerely,

Professor Sue McAndrew

Chair of the Research Ethics Panel

Appendix 6: Ethics approval Aga Khan University

THE AGA KHAN UNIVERSITY

Ref: 2018/REC-78 (v1)
24th September 2018

Ms. Isabel Kambo
Principal Investigator and Faculty member
School of Nursing and Midwifery, Aga Khan University, Kenya

Dear Ms. Kambo and team,

Re: EMPLOYERS' AND EMPLOYEES' PERCEPTIONS REGARDING THE PROMOTION OF HEALTH AND WELLBEING IN THE WORKPLACE.

The Aga Khan University, Research Ethics Committee (REC) is in receipt of your proposal submitted to the Research Office (RO) on 31st August 2018. In a meeting held on 10th September 2018, the committee appreciates a well-written qualitative research proposal.

The committee has granted conditional approval (as per attached official stamped protocol) for this project based on core ethical standards, which have been fully instituted in the protocol. Prior to commencing the study, you will be expected to obtain a research permit from the National Commission for Science, Technology and Innovation (NACOSTI) and also obtain approval to conduct your research in the urban area of Nairobi County, indicated as your study site. Copies of these approvals should be submitted to the Research Office for record purpose. Subsequently, you are authorized to conduct this study from **24th September 2018**. This approval is valid until **23rd September 2019.**

The study should be conducted in full accordance with all the applicable sections of the REC guidelines and you should notify the REC immediately of any changes that may affect your research project. You must immediately report any unanticipated problems involving risks to the participants. All consent forms must be filed in the study binder. You must provide an interim report before expiration of the validity of this approval and request extension if additional time is required for study completion. You must advise the REC when this study is finished or discontinued and a final report submitted to the Research Office.

If you have any questions, please contact Research Office – on research.supportea@aku.edu or call 020-366 2148/1136.

With best wishes,

Dr. Amyn Lakhani, Chairman
Research Ethics Committee, AKU (Kenya)

Appendix 7: Research permit -NACOSTI

THIS IS TO CERTIFY THAT:
MS. ISABEL NJERI KAMBO
of AGA KHAN UNIVERSITY, 39340-623
Nairobi,has been permitted to conduct
research in *Nairobi County*

on the topic: *EMPLOYERS' AND EMPLOYEES' PERCEPTIONS REGARDING THE PROMOTION OF HEALTH AND WELL BEING IN THE WORKPLACE*

for the period ending:
1st November,2019

Permit No : NACOSTI/P/18/47115/26009
Date Of Issue : 3rd November,2018
Fee Recieved :Ksh 2000

.....
Applicant's Signature

.....
Director General
National Commission for Science, Technology & Innovation