

The blind men and the elephant

Journal:	International Journal of Health Governance
Manuscript ID	ijhg-10-2018-0053
Manuscript Type:	Clinical Governance Reviews
Keywords:	Emerging healthcare delivery structures < Health economics, Health policy, Obstetrics < Health Professions, Adverse events or outcomes < Health Service Quality Assurance, Patient safety < Health Service Quality Assurance, Qualitative research < Research Methods, Vaccines or vaccination

SCHOLARONE™ Manuscripts

The Blind Men and the Elephant

Introduction

An old folk tale describes five blind men encountering an elephant. One grasps the tail, another feels the tusk, the third explores the flank while the last men encounter an ear and the elephant's trunk. Each man describes a very different animal, yet all the descriptions together provide a clear picture of the elephant. Similarly each article in this issue of IJHG is very different. However taken together they provide an informative overview of some current global issues in health governance.

All the articles, but one, include a focus on improving the quality of care experienced by patients and clients in diverse settings. From an analysis of vaccine development and distribution in lower and middle income countries (LMICs), through discussion of prevention of pregnancy loss in India, to exploring young people's experiences around adolescent health clinics in Ghana, the authors present topics that are diverse in their broad range but share a common theme of health improvement. The outlier in this collection is an article about the 'second victim' associated with adverse health care incidents.

The second victim in a critical incident

In an opinion piece, Kable (2018) suggests that health professionals, involved in instances where patients or clients are harmed, lack institutional recognition and support. At first reading, Kable's article might seem out of place in this issue. However on reflection, all clinical practitioners will at some point in their careers be involved in a critical incident, whether a preventable death, a 'near miss' or an incorrect diagnosis. Clinicians who are supported to learn from such events may go on to become more competent and confident practitioners. Those who do not receive such institutional support may suffer from shame, anxiety and professional isolation. Outcomes may be as serious as PTSD or even suicide. Ultimately the institution's choice to support individuals and to help them develop their knowledge and skills will result in a more competent and confident workforce providing higher standards of care.

Developing vaccinations in MLICs

A topical public health issue is the development of new drugs, particularly the vaccines so important from a public health perspective. Vaccinations prevent the spread of highly contagious viral illnesses, thereby protecting the vaccinated population, and by association, members of the co-existing population who have not been vaccinated. However it is important to maintain a high level of vaccination. Once vaccination levels fall, diseases that have been nearly eradicated may reemerge as serious public health problems. Making vaccinations available for LMICs has always been challenging for the pharmaceutical industry both in the prevention of outbreaks of what the WHO terms 'global disease' that

affects high income as well as low-income countries, or 'neglected disease' affecting mainly low-income areas (Towse et al 2011). Difficulties in achieving vaccination targets include pricing structures, storage and transportation; overcoming these difficulties in LMICs could have a significant impact on cognitive development, educational achievement, labour productivity and income (Lewis 2016). However Saigian (2018) suggests that in LMICs, price is a more important factor than such cost-benefit analysis. Therefore, only by making vaccines affordable can countries benefit from economic savings associated with a healthy population. Suggestions for achieving this aim and making vaccines more widely available in LMICs include greater involvement of local universities in the development and testing of vaccines and other medications, adoption of existing risk-tested vaccines, adaptive licensing to allow early release of new vaccines and prioritizing vaccines with the greatest public health benefits.

Preventing recurrent pregnancy loss

Another problem prevalent in LMICs is maternal/child health, particularly morbidity and mortality associated with childbirth. Kaur (2018) examines the problem of recurrent pregnancy loss in India and suggests that a better understanding of the combined function of vitamin B12 and folate in promoting placental development and ongoing fetal nutrition could help women experiencing recurrent pregnancy loss. In a comparison of a control group of women who had experienced two consecutive successful pregnancies with women who had experienced three consecutive miscarriages or stillbirths, women in the recurrent pregnancy loss (RPL) group were found to have less anaemia and higher folate levels. Researchers suggested that this may be due to supplements given as part of the women's medical care following a pregnancy loss or in preparation for a subsequent pregnancy. However, vitamin B12 levels were lower in this group indicating that depletion of vitamin B12 in the presence of high folate concentrations may be the cause of pregnancy loss. This can be explained by an understanding of the physiology of folate/B12 interaction. In the absence of vitamin B12 high folate levels contribute to high maternal plasma homocysteine levels which Yeter et al (2015) concluded are associated with intrauterine fetal growth restriction (IUGR) and still birth. IUGR is the most common factor identified in stillborn infants (Cosmi et al 2011). In instances where an infant with IUGR survives birth, the Barker hypothesis (Paneth and Susser 1995) suggests that associated long-term health problems such as cardiovascular disease and non-insulin dependent diabetes may not be identified until adulthood.

Adolescent health clinics in Ghana

While maternal health is a major issue in LMICs, adolescent health is also a key area of concern. Promoting healthy behaviours and life choices in the teenage and young adult years can help to maximize potential in adulthood. Educational achievement, prevention of early pregnancy and parenthood, protecting against sexually transmitted infections and reducing risks associated with alcohol or drug misuse are all health-associated benefits. Health providers in Ghana are seeking to improve adolescent health centres and to encourage young people to attend for health information and guidance rather than just viewing clinics as places to go for treatment. Anaba (2018) questioned adolescents about how

they perceived health clinics for people in their age group and asked for recommendations about how services could be improved. Adolescents are perceived as risk takers who engage in risk-associated behaviour as part of their transition to adulthood. This may include sexual experimentation, drug or alcohol use, poor nutrition or exposure to violence. At the same time, adolescents typically do not seek health information or advice until a problem occurs. Making adolescent health clinics more user-friendly may help to encourage earlier access.

Responses were congruent with the World health organization (WHO) standards for adolescent health care. Young people wanted clinics to be accessible and friendly with care provided by skilled professionals and with age-appropriate health information and literature available. While young people were quite positive about the levels of care received and the friendly, welcoming atmosphere of clinics, they wanted clinic hours to reflect their own availability more closely and for health centres to provide more health information in the form of leaflets that they could take away with them. While health information was displayed in clinics, young clinic users felt that information was difficult to assimilate or remember after a single exposure in a clinic waiting room.

Ghana has a young population with over 29% of people between the ages of 10-24. Creating safe spaces where young people can come for health information and advice as well as health care is a key aim of the country's Adolescent Health Service Policy and Strategy (Ghana Health service 2016). With falling birth rates and an ageing population, today's adolescents are recognized as key contributors to the Ghanaian economy in the years to come.

Improving surgical aftercare at weekends

Health governance embraces all aspects of health care, from public health to medicine, to surgical recovery. A challenge for orthopaedic surgery in the UK is highlighted in this issue of IJHG. The problem, and its solutions have wider applications and should cause clinicians from a range of medical and surgical fields in many countries to reflect on the care given to patients during times when fewer senior doctors are present. Khoury (2018) presents an argument for improved care for postoperative orthopaedic patients during the weekend when staff levels are lower. Aylin et al (2013) concluded that patients who had elective operations later in the week or at weekends were at greater risk of mortality and morbidity than patients having operations in the early to mid-week period. This finding seemed to point to the timing of the operation as the factor rather than the condition of the patient at the time of surgery. Earlier studies had not separated elective from emergency surgery; as Aylin points out, emergency surgery is often done as a response to trauma and victims of trauma tend to be older and frailer with more pre-existing co-morbidities.

Arguing that the time to investigate whether or not weekends pose greater dangers to patients is past, Khoury suggests that clinicians must ensure that high standards of care are maintained throughout he week. Gaps in weekend care included failure to recognize early signs of Sepsis, particularly in elderly patients and lack of a full medical review the day following surgery. In order to identify

an acceptable standard for weekend postoperative reviews, a simple closed loop audit was done.

Stage one consisted of a retrospective audit to determine if patients who had operations at the weekend received a day-one postoperative review. Only 54% of patients received such a review (n=26) against the standard stating that 100% should. In stage two a change was introduced. This consisted of printing a list of all weekend surgery to be used at the doctors' handover for the weekend team. In stage three a re-audit was undertaken over a 4-week period. The success of the intervention was demonstrated by the fact that 96% (n=48) of patients had now been reviewed on the first postoperative day.

The importance of this study is that it places the emphasis on what can be done rather than on the validity of the problem. In shifting emphasis from asking the question 'Is there a weekend effect' to ensuring improved care at the weekend, patient benefit was demonstrated.

Decentralisation of healthcare in Greece

On a macro level, the organization of health care can have significant effects on patient care. In the UK there has been a move towards centralisation of care in recent years that has seen smaller hospitals close and resources reassigned to regional trauma centres. It has been argued that such centralization can improve community services by redirecting local resources to elderly patients or people with chronic conditions (Burrows and Woolland 2014). In Greece however the movement in healthcare has been towards decentralization. This has been attempted and abandoned on several occasions between 2001-2007. Athanasiadias designed and carried out a qualitative study to elicit the views of regional health directors. Fifty invitations were sent to individuals who had served as directors of health regions between 2001-2009. Thirty-seven of these agreed to participate, providing informed consent. Interviews were conducted over a three year period and were quite extensive, lasting on average almost an hour. Four themes identified were: 1) Conceptual framework of health decentralization; 2) Type of health decentralization; 3) Personal experiences and relations with local stakeholders and 4) Achievements and failures during the tenure of the participants.

Participants all reported that decentralization should serve to address specific local needs and lead to better coordination between primary, secondary and tertiary care. This should address inequalities in health care particularly in peripheral regions. However, participants were disappointed in the way in which decentralization was implemented as they identified reluctance from the Ministry of Health to release power, particularly fiscal and political power. While the decentralization of the administrative function of their role enabled directors to organize care appropriately for a specific region, they did not have power to make final decisions on a range of issues. The more optimistic of the participants described the current situation as a 'first step' in the true decentralization of health care and health resources. However the majority felt that decentralization must be extended to be truly effective. Several key recommendations were made including coordination of health regions with the administrative regions of the

country, better distribution of medical and nursing staff, and political support for a more comprehensive transfer of political and fiscal power to the regional health directors.

Developing an interactive model of health technology assessment

In the final article reviewed for this issue, Bahadori describes designing an interactive model of health technology assessment in Iran. Health technology can be a somewhat confusing term. In its most basic interpretation, health technology means the systematic application of scientific knowledge, medicines, medical devices and surgical procedures used in health care. However, the meaning of health technology has expanded to include the organisations and support systems that facilitate care as well as the ethical principles underpinning the delivery of care.

The primary purpose of health technology assessment (HTA) is to determine the cost/benefits of different aspects of health technologies. Many HTAs are conducted at the local level, which allows greater emphasis on the integration of ethics to increase transparency and accountability. In conducting an HTA scientific decision making processes are followed; this usually includes a systematic review of the literature. Reviewing previously published evidence aids in a comprehensive understanding of the health technologies under investigation including the context in which care is provided.

Bahadori's interactive health technology framework was developed from a questionnaire completed by sixty experts in the field of health technology in Iran in 2017. The results were used to present a tabular representation of the factors affecting and affected by health care technologies. These included items such as safety, knowledge, costs, effectiveness, ethics, and social and legal concerns. The results demonstrate the multi-factorial nature of health and the technologies required to support health in its widest sense.

Conclusion

The variety and scope of the articles in this issue of IJHG should provide readers from a variety of disciplines with something of interest. However, in a journal catering to a wide range of medical and health professionals, the most important lessons are to be learned from each other. As the blind men who felt parts of the elephant came to realize, it is only by sharing knowledge that we gain a comprehensive understanding of that which we encounter.

References

Anaba E (2018) Assessing health care quality in adolescent clinics, implications for quality improvement. *IJHG* 23.4

Athanasiadis A (2018) The health decentralization process in Greece: The insiders' perspective. *IJHG* 23.4

Aylin P, Alexandrescu R, Jen MH, Mayer EK, Bottle A (2013) Day of week procedure and 30 day mortality for elective surgery: retrospective analysis of hospital episode statistics *BMJ* 2013;346:f2424. Accessed 09.10.2018 from: https://www.bmj.com/content/346/bmj.f2424

Bahadori MK (2018) Designing an interactive model of factors affecting the health technology assessment (HTA) in Iran. IJHG 23.4

Burrows S and Woolland K (2014) Centralisation is crucial to achieve better care locally. HSI Accessed 09.10.2018 from:

https://www.hsj.co.uk/comment/centralisation-is-crucial-to-achieve-bettercare-locally/5071616.article

Cosmi E, Fanelli T, Visentin S, Trevisanuto D, Zanardo V. (2011) Consequences in infants that were intrauterine growth restricted. Journal of Pregnancy 2011. Accessed 09.10.2018 from:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3087146/

Ghana Health Service (2016) Adolescent Health Service Policy and Strategy (2016-2020) Accessed 09.10.2018 from:

https://afro.who.int/sites/default/files/2017-

10/ADOLESCENT%20HEALTH%20SERVICE%20POLICY%20%20AND%20STRA TEGY.pdf

Kable A (2018) Why clinicians involved with adverse incidents need much better support. IJHG 23.4

Kaur L (2018) Recurrent pregnancy losses vis-à-vis anemia and vitamin (Folate/B12) imbalance. IJHG 23.4

Khoury A (2018) Improving weekend review for trauma and elective orthopaedic patients in the post-operative period. IJHG 23.4

Lewis L (2016) Economic benefits of vaccines in developing countries. *Borgen Magazine* 23 February 2016. Accessed 09.10.2018 from: https://www.borgenmagazine.com/vaccines-in-developing-countvaccines-in-

https://faculty.fuqua.duke.edu/~dbr1/research/developing-Oxford.pdf

Yeter A. Tops.
homozysteine k.
Petul Medicine 28 \
17
18
19