Improving Global Healthcare by Focusing in Quality

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Abstract

Global health care can be improved through the use of sound quality management strategies. Health care quality is defined as the ability of the facilities to provide safe medical care to patients and achieve the anticipated health outcomes. The main quality aspects in healthcare include: patient safety, effectiveness, patient centered services, the ability to provide health care services to the patient on time, efficiency and equity. Previous research and cohort studies document the use of quality as a vital tool in global health. These researches raise a number of issues that can be used to improve quality.

In this paper, a systematic literature review was conducted. Data was collected from already published materials on health care quality. The data was analyzed through content analysis to determine the major perspectives. The results indicate that the main quality aspects that improve global health are the use of information technology and e health solutions, use of strategic human resource management, training health care workers, reducing disparities when providing healthcare services, developing good policies that improve healthcare quality, use of evidence based practice, improving the medical service efficiency and patient safety.

Keywords

Global Healthcare, Quality Aspects, Information Technology, and Healthcare Quality.

Introduction

Quality improvement is the central focus in many health care institutions and among policy makers. Quality can be defined as the probability of achieving the anticipated health outcomes that are consistent with the current professional practice and patient demand. The main aim of healthcare quality is to enable people achieve a healthy, safe and longer life span. Quality in healthcare therefore determines the level of excellence exhibited by the service providers and facilities. Healthcare quality is expressed in terms of safety, effectiveness, patient centered services, the ability to provide health care services to the patient on time, the level of efficiency and equity[2].

In terms of safety, the health care facilities must provide services that prevent death and bodily harm to their patients. In terms of effective services, these facilities must provide services that follow and uphold the general scientific knowledge. In addition, the services must be beneficial to the patients. The services provided must put a lot of emphasis on the patients and be responsive to their needs. The services must be provided on time to avoid the patients suffering or their condition worsening. Health care services must also be efficient and avoid wastes by

using lean methods. Lastly, the services must be equitable as this ensures that there are no disparities in the quality of services to different people. The healthcare facilities and services can be improved globally through quality improvement. This is done through a number of strategies which guarantee the patients safety and prevent the occurrence of new diseases.

This report focuses on strategies that improve global health though quality improvement. The paper identifies the main strategies used to improve health care quality through a systematic literature review of the current publications in the health care industry. The paper also stipulates quality measurement methods and the impediments that policy makers and other healthcare professional face when improving quality. Through the use of systematic literature review, the research identifies the current global problems and methods through which quality improvement results better global health care.

Literature Review

This literature review discusses in great details the publications on the recent trends in global healthcare quality. Studies on the issue of healthcare quality were analyzed in order to identify the current cross cutting issues.

Black, A.D., et al.[3] investigated the impacts of quality and safety in health care when using Internet and IT (information technology) solutions. Using a systematic literature review, the study found out that e health played a significant role in improving the storage and retrieval of medical information, assisting doctors and healthcare practitioners when making decisions and in providing healthcare to patients located in remote locations. The research however found out that most policy makers have a problem in quantifying the benefits of e health and cannot therefore solicit enough funding and support to implement such systems. Poon, E.G., et al.[25] document that the uses of modern IT solutions and bar code readers have significantly improved procurement and administration of prescriptions. Bar codes verify medications preventing errors and enhancing the patient's safety. Studies by Ammenwerth, E., et al.[1] document the importance of modern IT in improving global healthcare through enhancing the quality of service delivered, improving medical service efficiency and reducing the overall costs. Chaudhry, B., et al.[8] found out that IT solutions improve the service quality and reduce administration costs in most health care institutions. Bryan, C. and S.A. Boren [6] found out that computerized systems, IT and ehealth solutions improve the health quality by assisting in information storage, retrieval, decision making and providing solutions to patients in remote location. Ovretveit, J., et al.[21] investigated the importance of information technology in improving the quality of healthcare. Their study showed that IT improved communication and flexibility among the healthcare workers. Various studies also document that use of IT improves communication, teamwork, corroborations and the general healthcare quality globally. Ludwick, D.A. and J. Doucette[17] conducted a study on the impact of information system on health care in seven countries. Their study indicate that such system improve quality, procurement, patient privacy, record keeping, efficiency and reliability. Though many studies indicate the importance of e health systems in quality improvement, few studies document the risks that health care facilities face when installing such systems. In addition, few studies quantify the benefits achieved by implementing such systems. It is therefore imperative to carry out this research to evaluate the benefit of e health in light of major impediments such as risks, costs and capacity[4].

Human resource development and improvement in most health care facilities improves the quality of care provided. Lack of adequate training and motivation among health care workers affect the service quality. Gowen, and Tallon[13] conducted a study to evaluate the importance of good human resource management (HRM) in improving the quality of health care. In their study, medical practitioners from 587 facilities in the USA were issued with questionnaires. The study found out that there exist a strong positive correlation between the health care quality, number of errors during treatment and the overall efficiency of the service provided. Research by Chen, L., et al.[9] evaluated the impact of global healthcare capacity on healthcare quality. The research documents that building human resource competency and capacity is pivotal in achieving better global care. In the developing countries, the doctor and nurse to patient ratio is very low and this increases the health problems in primary healthcare institutions. The study document other problems associated with inadequate HRM as low skills, skilled employee shortage, unequal worker distribution, poor working conditions and susceptibility of the healthcare workers to contagious diseases. The research indicate that the global HRM problem can be solved through effective national strategies and international collaboration, shared responsibility and improving the skills of workers globally. Rowe, A.K., et al.[26] states that poor developing nations have low performing workers with very poor healthcare skills. This in turn affects the service quality and impede on good healthcare. This study states that international interventions to improve global health in these countries are not effective and there is need to formulate better multifaceted interventions that target a specific locality. The study indicates that health ministry's research findings should be used to improve local and national health quality. Healthcare workers performance is imperative in the achievement of millennium development goals. Strategic HRM improves workers skills and performance but this varies between different countries and yields different results globally. From the study, there is need to localize HRM issues, motivate workers towards change and create awareness about the local issues affecting healthcare. The medical health quality is directly influenced by worker satisfaction and therefore strategies of empowering employees in hospitals should be instituted to improve global health. Campbell, S., et al.[7] investigated the impacts of pay based on performance in the UK. Their study found out that these pay system was associated with increased improvement in management of chronic illnesses and professional conduct.

Drain, P.K., et al.[11] document that training and educating workers plays an important role in improving global healthcare. Their study indicates that international immigration increases the spread of diseases and this have increases the global burden for contagious and chronic illnesses. To circumvent this problem, workers must be trained on new international health issues from different social cultural perspectives. International health Workers rotation program should be instituted to improve the knowledge among the practitioners. Nelson, B.D., et al.[20] states that global pediatric health programs can improve the quality of care as workers become knowledgeable in new global challenges and issues.

Ovretveit, J., et al.[21] carried out a research to determine the global impacts of unsafe healthcare and its impacts on quality. Their research found out that unsafe healthcare increases morbidity and mortality at a global level. The study found out that over 16% of the patients suffer harm from unsafe health treatment. Various studies also show that unsafe medical care increases the diseases burden, cost of hospitalization and reduce healthcare burden. Studies by Braithwaite, J., et al.[5] focused on identifying ways of improving health care quality inquired from over 2000 healthcare workers in South Australia. Their research sought to determine major ways through

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which patient safety could be improved. The results show that different employees have varying perceptions on patient safety and this impedes the successful quality improvement. The main healthcare quality suggested by these workers were: improve infrastructure, capacity building by increasing the number of healthcare workers, formulating and implementing policies, educating health care workers, focus on patient, better leadership and management and lastly, improving communication and teamwork. Landrigan, C.P., et al.[16] conducted a study to determine the impacts of harm caused to inpatients in ten North Carolina hospitals selected using stratified random sampling. The research showed that low quality services expose patients to harm and there has been no significant improvement. This calls for the development of better measurement, policies and tools for improving safety.

There is need to use findings from international and national studies in improving global health care[12]. This requires collaboration, partnering and development of national and international policies to address the current global healthcare problems. The study indicates that the main strategies for improving healthcare are formulating health strategies and interventions, using appropriate technologies, designing proper healthcare systems (HRM, procurement, information management and service delivery), developing better primary and secondary care facilities, providing good leadership and educating workers.

 Studies by Marmot, M.[18] stated that there is need to strengthen global and national health equity. Health care should not be discriminatory and should be accessed by all disregarding their social economic status. Starfield, B.[29] stated that global health care presents many challenges in terms of equity, healthcare costs, population, disease morbidity age and technological interventions. All these issues greatly correlate with equity and results to disparities in health care provision which in turn affect quality. Patouillard, E., et al.[23] stated that the use of private and nongovernmental organization (NGO) in poor and developing nations could improve the healthcare quality. A systematic literature review on interventions by NGO among the marginalized communities' showed an improvement in healthcare quality and equity. However, private health institutions did not improve health care equity and service quality among the poor residents.

Delivering medical services on time has great impacts on the health care quality. Sofaer, S. and K. Firminger[28] investigated the patient perception on health care quality. Among the main patient quality requirement was timely service delivery. Studies by Poissant, L., et al.[24] documented that the use of electronic systems and records greatly increase time efficiency by significantly reducing the documentation time, record search and retrieval processes. Kerber, K.J., et al.[15] document that lack of timely service delivery is the leading cause of death among antenatal and postnatal mothers as well as infant and newborn babies. This problem is persistent in communities located in remote locations in the developing nations where primary healthcare facilities are far.

Study Objectives

The primary objective of this study is to identify quality aspects that result to improvement in global healthcare. The research mainly focused on issues that address the current healthcare quality issues and ways of improving them. This study investigated the main quality issues that

primarily influence global health care, their relative importance and impacts on global healthcare.

The secondary objectives for the study include:
To conduct an in-depth literature review on the main quality aspects suggested by previous studies.
To identify the main quality issues affecting healthcare- this will be done through a systematic literature review on healthcare studies around the world.
To elucidate the impacts of these quality aspects on global health care.
To stipulate strategies that can be used to improve the identified quality issues.
To prepare a discussant detailing the current research findings, a comparative analysis of the current study finding with previous studies.
The paper will also suggest future research and studies in this field.

Research Methodology

A qualitative study methodology was used for research paper. According to w Creswell[30] a qualitative study develops knowledge based on constructivism and interpretivism perspectives. In qualitative method, the researcher develops knowledge based on the people's understanding about a given situation. The method is widely used to study social issues such as healthcare quality perception among people. The study methodology develops a pattern or theory from the existing knowledge or from people view about a given phenomena. Most of the quality issues in healthcare are based on patient and healthcare workers perception and therefore, this is the most suitable study methodology[10].

Under the ambit of qualitative research method, a systematic literature review on cohort studies done between 2005 and year 2013 was used as the study design. The systematic literature review extracts information from the already published materials on a given study phenomenon. The main justification for using this method is that it gives detailed information about a particular study topic.

 A systematic review study design entailed the formulation of the study questions that were pertinent to the research objective, searching for relevant articles based on a developed search criteria, selection of the study articles using a predetermined inclusion criteria, analysis of these articles through content analysis and stipulating the research findings[22].

The main steps in this paper include:

a) Question formulation for the researcher; this entailed the formulation of pertinent study questions; these include: (i) what are the main quality aspects that affect global healthcare, (ii) How do these affect the progress of healthcare institutions, (iii) How can global healthcare be improved through enhancing quality.

b) Literature search: a detailed literature search from major electronic databases was then done. The keywords were "global healthcare through quality", "quality aspects in global healthcare", "information technology", and "healthcare quality".

c) Selecting articles: more than 25 articles were selected using a predetermined inclusion criterion. All articles would be between 2005 and 2014 were included in the study. Articles dealing with healthcare quality, cohort studies on healthcare quality were also included for analysis.

d) Analysis: the articles selected for the study were analyzed using content analysis. This entailed a detailed study of the article to establish the main points. This was followed by cording process which extracted the main quality issues documented in each article. After this, summary will be categorized into groups. These enabled the researcher determine the main quality aspects and their relative impacts on global health care.

Results and Discussions

a) Information Technology

Most of the articles reviewed showed that information technology is imperative in improving global health quality. Health information technology solutions improve quality as well as reducing cost. The use of IT has also lead to reduced medication errors making it possible to provide quality, up to date and accurate services. With the proper combination, quality of service is guaranteed and operation cost reduced. The reviewed articles indicate that the main uses of IT in improving health quality include: use of electronic records which reduce stress and workload of manual record keeping and prescription; ensuring proper coordination between caregivers and patients thus improving the quality of service offered; assist in health care decision making and bio-surveillance which assist in reducing the reliance on paper charts notifying recalls. Previous literature also document the vital role played by IT in improving healthcare quality, improving timely service delivery and reducing costs.

b) Improving health equity

The articles reviewed also showed that reducing health service disparities is important in achieving quality. In the developed and developing nations, the services provided to patients are greatly influenced by racial, ethnic and economic class of the patient. Inequalities in the quality of health are magnified in low-income societies as compared to developed societies. There is a life expectancy difference of more than 20 years between some developed and middle-income economies. To reduce this gap, organizations such as the world health organization have started investigations on the social factors influencing health care provision. The general concept is that the financial stability increases the likely hood of better health services[19].

c) Training health care workers

The articles reviewed also indicated that training and education were pivotal in improving global health quality. Training health care providers on leader ship skills imparts a deeper sense of responsibility and commitment to improvement of global health care services. It also trains the providers on effective decision-making skills based on scientific concepts. Training promotes teamwork and personal initiatives in the workplace as well as improves the workers and patients safety. Effective technical and leadership skills must be imparted to health care service providers including nurses and support staff. Training also enables creation of effective organizational cultures that are aimed at improving the quality of health care to patients. For quality and patient

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centered care to be delivered, professional training should be carried out as an ongoing process to provide opportunities for career growth and job satisfaction. Deeper training on basic concepts of medical care will ultimately contribute to improvement of quality in global health care.

d) Improving patient care and safety

The other factor that influences global health is the patient safety and care. Most reviewed researches show that patient care and safety is closely related to cost, the competency of health care workers, level of motivation and the care facility equipment. Patients from low income areas are unable to access quality healthcare. A conducive working atmosphere such as the patient to nurses ratio, appropriate funding by the government, involvement of nurses in the decision making process and a good doctor to nurses relationships contribute significantly to care given to patients as well as their personal safety[16]. Hospitals and nations which regard patient safety and care as imperative have recorded improved healing process, reduced mortality and patient satisfaction. Most studies indicate that there are many deficiencies in the quality of care given to patients across the globe.

e) Human resource management (motivating, appraising and empowering workers)

Organizational change can be an effective tool in the improvement of quality in the health care system. Human resource management techniques have been shown to establish and strengthen the conduct of professional health care services. HRM improves health care, enables career development, appraises and motivates healthcare employees and results to these workers offering quality and professional health care. The human resource managers must allow workers to achieve personal objectives as well as organizational objectives for patient care to improve significantly.

f) Offering effective services

The articles reviewed in this study document that good and effective services are paramount to improving healthcare quality. Effective service delivery in the medical industry is influenced by factors such as: availability of drugs, equipment, government funding, adequate staffing and professionalism. Other nations have adopted policies where improved performance of certain departments has rewards and incentives to motivate staff for continued performance.

g) Encouraging the use of Evidence Based Practice

Evidence based practice is a concept that can be applied to effectively improve the quality of health care provided in the institution and even globally. It is founded on the precept that scientific evidence must be applied as much as possible and the patients' preferences must be put into consideration. The evidence to be applied however depends on the level of training of the medical practitioners as well as their experience. Application of evidence-based practice to improve the global health care must be based on documented and accepted evidences due to the variability of evidence observed by practitioners. Incorporation of the patient's preferences ensures that their opinions are inculcated in the decision making process and this improves healthcare. Cooperation between patient and doctors lead to improved health care provision.

h) Research and Training

Research and training are central in achievement of quality health services. Health care research can vary in the domains and research aimed at improving care must focus on the key elements. These include how the population access health care services, the cost of obtaining the medication and the derived benefits such as reduced mortality and quicker recovery. Due to global variability, there is need for collaborations so that scientist and medical practitioners can share vital information to reduce disease morbidity, mortality and burden.

i) Developing adequate global healthcare policies

The policy framework is crucial in determining factors which adversely affect the health care system. Policies affect the financing and resource allocation by governments and provide main focus areas. Global quality of health is an issue requiring a lot of attention. The nation's performance in disease prevention and control is greatly affected by its ability to institute appropriate policies.

Conclusions and Future Research

The management of the global health care system is becoming a concern to many governments. Various researches have also been conducted on the issue of the quality of the global health care services. Various measures have been advocated through research on critical areas of focus to achieve a turnaround in health care service provision. Investment in information technology systems for provision of health care is vital for medical processes such as samples analysis, monitoring of body conditions and patients surveillance. Studies have shown that poor information technology infrastructure is synonymous with poor quality health care provision.

Equitable distribution of health care services is another key pillar over which quality of health care can be managed. This means the government and health care providers ensures policies are formulated while considering the underprivileged people in order to reduce health care disparities.

The use of accurate measurement techniques is also crucial in delivery of high quality health care services. Various quality aspects must be measured accurately and ways of improving these aspects determined.

Training is another important factor used in achievement of quality health services. Training of nurses for leadership and technical skills enhances their performance at work and better patient care. In addition, all healthcare workers must be well and frequently trained to cope with the changing health issues and challenges. Health care workers and particularly nurses need to be trained on leadership and management as these translates to better productivity and improved patient care. In addition to training, these workers need to be empowered and motivated so as to deliver the expected quality. Payment related to performance and appraising medical staff regularly will go a long way in ensuring that workers deliver and guarantee the patient safety.

Evidence based practice is another recommended strategy for global improvements in the provision of health care. This is whereby factual evidence collected and used in decision-making.

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Learning from practical examples from other parts of the world will lead to effective formulation and implementation of health care policies and interventions.

Research on the improvement of quality of health care continues with the technological advancements be given more focus. Information technology still remains the area of key focus on the improvements in the delivery of health.

Future research

This study and other studies documented in the literature review used a systematic literature review to study global health quality. There is need for practical cohort studies in various countries to document the actual quality issues and their impact on health care.

There is need for randomized control trials to test the strategies used to improve global quality. These tests should evaluate health quality before and after an intervention strategy to improve quality. The results obtained can be used to determine the effectiveness of each strategy within a given region or locality.

There is need for studies to develop adequate health quality measurement tools that can be used to test healthcare quality. These tools will be very useful in assessing the healthcare quality and formulating intervention strategies.

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