Quality and safety of care: Moroccan experience

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Abstract

Background. The Ministry of Health and Social Protection (MOHSP) of the Moroccan Kingdom acknowledges the crucial need to improve the quality and safety of care provided to patients. As a result, they have launched a process that involves, developing a conceptual framework and implementing national health policies aimed to enhance services offered to hospital users.

Objective. The aim of this study is to identify all the approaches developed by the MOHSP since 1990 to enhance the quality and safety of care.

Materials and Methods. This study is a descriptive qualitative analysis. The data was collected over a six-month period, through semi-structured interviews with professionals reporting to the MOHSP, and through a document analysis.

Results. The results provide a comprehensive description of approaches to quality and safety of care in the Moroccan health system, the findings reveal that these approaches are based on three complementary strategies: continuous quality improvement, standardization, and safety of care.

Conclusions. The Moroccan health system has implemented various strategies to improve the quality and safety of care. However, these strategies have not been sustained due to several factors. To ensure sustainability, the system needs to invest in capital and resources, involve quality experts in hospitals, use process-based approaches, strengthen legislation and regulations related to quality of care, and translate them into implementing decrees.

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Introduction

Quality of care refers to the extent to which healthcare services provided to both individuals and populations promote desired health outcomes and align with evidence-based professional knowledge.[1] Quality of care must be efficient, safe, and person-centered, while also being equitable, integrated, efficient, and timely to take full advantage of its benefits.[2]

Quality and patient safety are crucial components of the healthcare organization,[3] as demonstrated by various publications emphasizing their importance in the healthcare sector. For instance, the report by the Institute of Medicine titled "To Err Is Human: Building a Safer Health System",[4] urges healthcare organizations to foster a culture of safety. Moreover, the "Crossing the Quality Chasm" report has accentuated the issue of healthcare quality and safety,[5] and emphasized the need to improve it. These reports have generated international awareness and movement around this issue.

Each year, between 5.7 and 8.4 million deaths are attributed to poor quality care in low and middle-income countries,[6] including Morocco, which is considered a middle-income country. As a result, it is imperative to improve the quality of care and services offered to Moroccan citizens, while implementing the concepts of continuous quality improvement and standardization of care.

However, the Kingdom's Ministry of Health and Social Protection (MOHSP) has embarked on a process to improve the quality of healthcare facilities. This involves building a conceptual framework and adopting national, provincial, and regional health policies to enhance the quality of services offered to hospital users and to meet the population's requirements for quality care and services.

The topic of quality in Moroccan hospitals is still relatively new, and few studies have sought to understand this process. The main focus of research has tended to be on some of the quality approaches developed in Morocco. Belghiti and Khassouani analyzed the two approaches,[7] accreditation and quality competition, and their complementarity for quality improvement and sharing of lessons learned. Another study by Chahouati focused on describing the main quality approaches implemented by MOHSP,[8] identifying issues, obstacles, and constraints that hinder their sustainability in public hospitals in the Kingdom and identifying some avenues of improvement inspired by international standards, which could lead to the success of quality approaches in the public hospital environment.

Academic research related to our subject remains insufficient despite the wealth of existing quality approaches in Morocco. Our research aims to initiate a reflection on all the innovative approaches developed in Morocco to improve the quality and safety of care provided to patients and to establish a history of movements undertaken around this theme from 1990 until now. It is necessary to collect and share experiences on national quality efforts.[9]

Materials and Methods

This is a descriptive qualitative study that follows a comprehensive logic, by focusing on the description of the process of implementation of the quality and safety of care approaches by the Moroccan MOHSP.

To respond to the research problem, we used two types of data collection. On the one hand, we studied the documentation generated, including reports and all documents produced within the framework of the interventions implemented by the MOHSP, as well as scientific productions related to our subject (theses, articles), we also analyzed monitoring mission reports that collected this type of information. the analysis of the documents allowed us to gain a general understanding of the research problem.

On the other hand, we also collected and conducted a qualitative analysis of interviews with health professionals who work under the MOHSP, producers of the object of research. Specifically, we interviewed professionals from the Directorate of Hospitals and Ambulatory Care (DHAC), who are responsible, among other things, for the quality and safety of care and have direct experience in the implementation of quality approaches at the organizational level. The interviews were semi-structured, which is highly valued for their ability to engage in deep conversation, their flexibility, and their generative nature, which stimulates new ideas. Additionally, views were collected in their natural forms, including nonverbal communication.[10] During the interviews, we clarified the purpose of the study and the research question. The interviewees described their experiences. This helped to clarify what actions were complementary to the main projects and the process of evolution of the quality approach. The information was collected over a period of six months.

Ethical considerations

This study did not require ethical review or approval.

Results

Quality of care in Morocco

The first initiative began with the development of standards for family planning methods as part of the family planning quality assurance program launched in 1966. This was followed by the drafting of procedure manuals for the operating room, the drafting of procedure manuals for nursing management, as well as the production of standards for the continuing education cycle, and the drafting of manuals for standardizing certain laboratory standards.[11] Among the approaches adopted were the team problem-solving approach, clinical audits, and the development of quality circles in some healthcare facilities. The MOHSP even conducted a study on the quality of care in 1992 to get an overview of it.

Total quality management project

Shortly after these events, a project entitled "Total Quality Management" spearheaded the implementation of quality assurance methods in health services in general. This project started in 1992 in 5 provinces, gradually expanded to 14 sites in 1996, and then covered more than 53 sites in 8 regions in 2000.

National quality assurance plan

Towards the end of the 1990s, the MOHSP included the component "Improvement of the quality of care and services" in the strategic actions of the Economic and Social Development Plan 2000-2004, and this commitment was translated into the National Quality Assurance Plan (NQAP).[12] This program considers the quality of care as the correct execution of care and services according to pre-established standards to satisfy the users of the Moroccan health system and to achieve predetermined results. The DHAC under the MOHSP, initiated the process of implementing NQAP, with many actions, namely, the sensitization of executives at the regional level in 1996 and 1997, and the design of a training program for trainers in Quality Assurance. During 1999, a series of events occurred with the objective of implementing the NQAP, including the organization of a consensus workshop on the quality assurance approach for all MOHSP operators, the organization of two regional workshops on the development of norms and standards, and a workshop to sensitize and introduce the steering committee to the principles and methods of quality assurance. All of these actions eventually led to the development of the NQAP's strategic document, which was piloted and managed at the central level by a national commission and a steering committee. The process continued well beyond that until 2002 a national conference on quality and health was organized by the MOHSP, at the end of which a number of recommendations were made, including providing the necessary support for the establishment of an accreditation system, creating a national accreditation body, and training and raising awareness of the accreditation system among health actors and partners.

Accreditation of healthcare institutions

The year 2004 was characterized by several effects for the institutionalization and perpetuation of the quality approach, in particular, the launching of the accreditation process of health establishments, with the support of the World Health Organization (WHO) and the High Authority for Health. It was only effective after the promulgation by the parliament of the law instituting health accreditation in accordance with the provisions of Article 18 of the framework law 34-09 regulating the health card and the supply of care. This law defines accreditation as "a procedure for evaluating public and private health care institutions with a view to ensuring continuous improvement in the quality and safety of care, on the basis of indicators, criteria, and national reference systems".[13] To prepare for this, several activities have been carried out, including the creation of a national evaluation and accreditation committee, a diagnostic study of the quality of care and services in hospitals (public and private), the identification and training of visiting experts, development of a guide for visiting experts to help them better understand their role, their mission, preparation, and conduct of the accreditation visit in its various stages, the methods and principles of rating and the methods of writing the visiting experts report. We also have the training and accompanied the managers of four hospitals selected as test sites for the self-assessment process by the DHAC and tested the accreditation tools developed in four pilot hospitals of different categories.

This repository took shape in 2009 with the participation of 13 hospitals, then in 2012 was launched for oncology hospitals and in 2014 for psychiatric hospitals. A total of 8 assessments have been organized.

Quality competition

In early 2004, the MOHSP initiated a partnership with the GTZ, a German technical cooperation company, as part of a five-year program (2004-2009) to decentralize the health system with a focus on reproductive health, which began to support a process of advocacy for the Systemic Approach to Quality Improvement, leading to the design and launch of the Moroccan Quality Competition (QC).[14] In January a seminar was held, in which the guiding principles of QC were elaborated, the structures of the health system that should participate were chosen, and an action

plan for the implementation of its first edition was approved.

QC is a systemic approach to continuous quality improvement that creates positive and voluntary competition among healthcare facilities, which tends to rank healthcare organizations on the basis of the dimensions of quality, which are: satisfaction, accessibility, availability and continuity, rationalization of resources, safety and responsiveness, leadership and continuous improvement; partnership and participation. The first edition was launched in January 2007 and 188 institutions from all regions participated, while the second edition was launched in March 2008 and 212 institutions participated.[15] The MOHSP made participation in the 3rd edition (2010) mandatory and even extended it to maternity hospitals and diagnostic centers for tuberculosis and respiratory diseases. It has had several editions with the last one (7th) in 2018.

Many manuals have been developed to accompany it, namely, the manual for training auditors by The DHAC in 2005, the manual of service delivery structures based on the version of the health system in October 2008, as well as manuals for the evaluation of hospitals, health centers, health delegations and regions that are revised in each edition.[16]

Certification of birthing centers

As part of the Ministry's efforts to combat maternal and neonatal mortality, and as a means of improving the quality of care for mothers and newborns, a certification process for maternity homes was introduced in December 2008. The aim of this process was to bring the organization of maternity homes up to standard, to promote compliance with basic emergency obstetric and neonatal care as recommended by the WHO, and to improve the quality of care for women and newborns. It uses self-assessment and external evaluation to compare the current state of affairs with the selected benchmark. It assesses four dimensions: access to care, availability of basic emergency, obstetric and neonatal care, quality of care, and quality of management.

Its first cycle started in 2008-2009, and the second in 2011-2012, when 32 birthing centers were certified, compared to 95 birthing centers. The regionalization of the certification process began in 2013 with the development of a new procedure based on a participatory approach. Workshops for the development and validation of the regionalization procedure were held. Regional management committees have been set up to guide and supervise the process at the regional level and to mobilize the resources needed to implement the corrective measures identified during the audits. Training sessions were also organized for the regional certification focal points. The third edition of the program occurred in 2014-2015, with 28% of the birthing centers being certified.[17]

Tools for assessing the quality of maternal and child health care services and family planning

In 2011, the MOHSP developed a methodological guide to provide a tool for health professionals to assess and improve the quality of care in health facilities, based on internationally recognized measurement and evaluation elements, using two types of grids, the synthetic grid of quality assessment, two types of grids are used: the synthetic quality assessment grid, which allows for a global diagnosis by modules and quality components, and the detailed quality assessment grid, which zooms in on the elements where quality is lacking. The use of these grids makes it possible to standardize the evaluation, eliminate subjectivity and facilitate the evaluation.

5S-kaizen

In 2012, the MOHSP initiated a continuous improvement approach called "5S-kaizen" in health facilities with technical and financial support of the Japan International Cooperation Agency. This approach was first piloted in Salé and Sidi-Kacem in 2009. In order to improve the quality of care and services provided to health facility users, ensure work and care efficiency, eliminate waste and unnecessary expenses, prevent health risks, and involve staff.[18] To support the implementation of this approach, a guide was developed for deploying it within establishments, along with pedagogical software to enable self-training in the technique of implementing 5S activities.

Patient safety in Morocco

As an essential component of quality and a major objective of the health system, the MOHSP has developed and implemented a national strategy for safe care. This strategy aims to prevent and manage risks during patient care, in response to the 2002 resolution WHA55.18, which calls upon WHO member countries to focus on patient safety.

This commitment has been translated into several actions. Firstly, the dimension of patient safety has been integrated into the criteria for hospital accreditation, as well as the evaluated dimensions of QC. Additionally, through the certification of birthing centers. Furthermore, a risk management program has been implemented which includes the creation of a national platform for the notification of adverse events related to patient care. This platform allows professionals to enter data related to notified adverse events, enables the automatic transfer of information related to these events, and provides follow-up from managers at all levels of the system.

And through the legislative and regulatory aspects, including framework law 34-09 on the health system and health care supply, through articles 3, 4, 11, and 12. These articles commit hospitals to conduct a complementary and integrated intersectoral policy of prevention, which aims to identify and fight against potential health risks. The internal regulation of hospitals, created in 2010, through its 6th chapter dedicated to security, hygiene, and management of health risks. Additionally, circular N°83 DHAC was established to create a notification system for adverse events (AE) related to patient care. Circular N°76 concerns patient safety in the operating room and mandates the implementation of the surgical safety checklist. Finally, circular N°97 DHAC, issued on November 20, 2008, related to the safety of patients in public hospitals, requires hospitals to identify potential AE and implement preventive measures to mitigate risks when assuming patient care responsibilities.

Since 2007, the MOHSP has adopted the WHO's patient safety solutions including measures to address, medications that look alike or have similar sounding names, compliance with medication regimens during changes of department or care provider, errors in connections, catheters, probes, and intubation, single-use injection equipment, hand hygiene to prevent healthcare-associated infections, a surgical procedure performed correctly in the right place, monitoring electrolyte solutions concentration, communication during provider changes, and finally identity monitoring.

The MOHSP even developed methodological guides for risk management in Moroccan hospitals in 2016, to provide hospital managers with the methodology for adopting a risk management policy and especially to define the modalities of a prevention approach.

As for health vigilance, which is a form of surveillance applied to the risks attributed to medical goods, the MOHSP is committed to implement its policies, which are articulated around the same objective of safety and quality of care but operate according to distinct modalities. Such as infectiovigilance, pharmacovigilance, materials vigilance, hemovigilance, biomonitoring, and reagent

vigilance. To support these efforts, the MOHSP has created a Committee for the Fight against Nosocomial Infections. This consultation and support body analyzes the performance and quality of services rendered in relation to the set objectives. Its composition, attributions, and functioning modalities are stipulated in the Internal Regulations of Hospitals, specifically in articles 20 and 21.

Furthermore, pharmacovigilance has been integrated into various health programs, initiated by the creation of the National Center for Pharmacovigilance, which operates with the National Center for Toxicology within the Anti-Poison and Pharmacovigilance Center. Additionally, the creation of a technical committee of pharmacovigilance and a national commission of pharmacovigilance.

Discussion

The results provide a comprehensive description of the approaches taken to the quality and safety of care in the Moroccan health system, reflecting the investments made by the MOHSP to improve the quality of care offered to health system users. The analysis of the results shows that the general strategy adopted by the MOHSP, to improve the quality of care is based on three complementary approaches: continuous quality improvement, standardization, and finally healthcare safety and health vigilance.

Approaches based on continuous quality improvement

The initiatives and introduction of the quality approach dating to the 1980s were considered punctual and sporadic, lacking the necessary support from the managers at the time, and their contributions remained limited to raising staff awareness and improving the physical environment, while the quality improvement activity eventually fall into disuse, likely due to the lack of a structured quality assurance approach that could support the project and ensure its viability and sustainability.[12]

However, the NQAP did not achieve all of its objectives, it failed to spread a quality culture capable of generating change and reducing the effects of bureaucracy in Moroccan public hospitals, nor did it allow for sustainable improvement in the quality of hospital activities and services due to the lack of an environment conducive to its implementation and sustainability.[8]

Blaise, a WHO consultant, conducted a mission in 2003 to document and analyze quality improvement experiences in Morocco. According to Blaise, these experiences produced convincing results and were appreciated by both providers and management, but they were limited to a few pilot sites, and some of them had to be abandoned, leading to frustration among their promoters and actors.[19] Other authors, such as Bouchet and his colleagues, report that these quality management projects tend to be disappointing in the long run despite their initial enthusiasm and the short-term results, attempts to generalize them to the entire health system have not been successful so far.[20]

Regarding the quality competition that has just been implemented to remedy the shortcomings encountered in the above-mentioned approaches has proven its effectiveness in hospitals, while improving their performance levels in terms of management quality.[21]

Standardization approaches, such as hospital accreditation, have not proven to be successful. After ten years of its launch, no hospital has been accredited due to several factors that hinder its success. According to Belghiti, these factors are related to three things: the context that was specified by an epidemiological transition, the heaviness of the procedure, and the lack of steering, incentives for hospital participation, political commitment, instability of hospital managers, and the strengthening of organizational and functional capacities of the hospital.[8]

Despite efforts made, none of the quality approaches cited proved to be sustainable and disappeared at the end of the project. Sahel and his colleagues have highlighted factors that hinder the sustainability of this approach, namely, the poor support for the teams involved in this process and the absence of recognition of their efforts.[22] Other authors have pointed out that the lack of coordination between these different approaches is also a factor in failure.[9]

It's crucial that the Moroccan national health system address the challenge of the sustainability in hospitals quality approach. To achieve this sustainability, several specific actions need to be taken, based on our experience. These include investing in capital and other resources, which is invaluable when compared to the costs of non-quality. Furthermore, developing a national quality policy based on a plan of action in the area of intervention, using appropriate approaches such as the process approach, and making their implementation mandatory is essential, it is also important to involve quality experts with skills and capacities to provide leadership and technical assistance. Finally, strengthening legislation and regulations and their translation into implementing decrees.

These elements are the backbone of the sustainability and success of the quality approach in the Moroccan health system. Which are also supported by Akmal *et al*. According to them, "a sustainable quality improvement system requires quality approaches that are implemented throughout the organization, carefully funded and monitored, supported by a long-term strategy, and supported by quality managers who can integrate quality assurance into the health care organization".[23]

Limitations

The scarcity and lack of traceability and documentation related to our subject present a limitation of the study.

Conclusions

The Moroccan health system has implemented a wide range of strategies aimed at enhancing the quality and safety of care. These include systematic measurement, analysis, and improvement methods recommended by pioneers of quality care, that have been successful in other developed countries. These efforts showcase a strong commitment to improving the quality of care in Morocco. However, while some of these approaches have yielded positive outcomes, others have failed, and none of these approaches have been sustained in Moroccan healthcare facilities due to several factors. Based on our experience, there are elements required for their durability. These include investing in capital and resources, involving quality experts in hospitals, using simple approaches (process-based) to improve care, strengthening legislation and regulations related to quality of care, and translating them into implementing decrees.

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