Implementation of Quality Assurance Program in Sudanese Public Hospitals: Lessons Learned

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Abstract

Different approaches have been exercised to implement quality assurance program (QAP) in hospitals in different countries. No single approach approved to be effective in any country. Adaptation to local context is always required. Sudan has started its national QAP in health sector in 2001. Nonetheless, obstacles facing the program have led to poor and ineffective implementation. The main goal of this study was to identify possible interventions to improve the implementation of the QAP in public hospitals in Sudan. The four objectives were to: discuss the implemented QA policies and strategies; analyze the current challenges, search for possible interventions; and then giving practical recommendations. It was a review study of the existing QAP in Sudan. The ‘Policy Triangle Framework’ was used for the analysis of the current situation and for discussion of findings. Secondary data were collected from different sources through electronic and manual search from: electronic databases (Global Health, Public medicine (Pub Med), and Cochrane Library), specialized quality journals, and Sudan Federal Ministry of Health reports. The search was limited to articles published in English and Arabic Language after 1990. Sixty-seven articles have been studied. Different types of challenges have been revealed. The most important of which were: the QA policy formulated at federal level has not been well communicated with the lower levels. The limitations of the top-down approach (the implementation process) have not been tackled. The main contextual factors were related to: poor financial and technical capacities, disparities between the states, and non-supportive contextual culture. The main key persons like: physicians and hospitals’ managers were not well involved in QAP implementation. To improve the implementation of the QAP in Sudan, three sets of comprehensive interventions could be followed; Strengthening the QA system through establishment of QA committees involving different stakeholders at all levels; gradual implementation, in vertical and horizontal levels; and sustainability through training programs and reallocation of resources.

Keywords: Quality Assurance Program, Sudanese Hospitals, policy analysis

INTRODUCTION

In recent years, there has been a significant interest in the application of quality improvement programs into healthcare systems. The hospital industry, in particular, has embraced this concept and started to find different strategies to implement the Quality Assurance Programs (QAP) Carman et al., (1996). There are different 'quality terms' used synonymously in healthcare (Ovretveit 2004; Bashshur 2003; Brown et al., 1990). The commonly used ones are: Quality Assurance, Quality Improvement, Continuous Quality Improvement, and Quality Management (Bashshur 2003; Ovretveit 2003). The term 'Quality Assurance (QA), is firmly established and widely used[6]. It means all actions taken to establish, promote, and improve the quality of health care Bashshur (2003). To implement a QAP, there should be a long term 'quality strategy Ovretveit (2003). Carman and his co – workers
have Carman et al., (1996) defined the ‘quality strategy’ as a structured systematic process for implementation of quality programs. Different strategies have been tried in different countries, common ones are: the Standard-based Approach, Total Quality Management, and Accreditation programs. However, there is no single right approach that can work in every country. Effective implementation of any strategy requires adaptation and adjustment to suit the local context Peters et al., (2009).

This study derives its importance from two issues related to the healthcare quality in the public hospitals in Sudan: the poor quality of healthcare services and the ineffective implementation of the national QAP in these hospitals. Firstly, the quality of healthcare in public hospitals in Sudan is claimed to be highly insufficient Salih (2006). The National Health Report 2003 has related most of the healthcare problems in public hospitals to different quality issues. Absence of clear guidelines, work standards, and protocols for medical practice, the main leading factors Federal Ministry of Health (2003).

This situation has led the Federal Ministry of Health (FMOH) to establish the Federal Quality Assurance Directorate (FQAD) in 2001 to plan and guide the implementation of the national QAP(Federal Ministry of Health 2006: Federal Ministry of Health 2008). The FQAD has set the QA policies and produced several types of standards and guidelines to be implemented in all public hospitals in the country. These policies and guidelines were not effectively implemented. The ineffective implementation of the QAP in public hospitals in Sudan represents the second, but the main rationale of this study.

The ineffective implementation, as defined by Green, is the delayed implementation, non-implementation, or implementation that deviates from the set plan Green (2007). These three forms usually complicate the programs implemented in developing countries, where a sustained QAP is rarely seen Brown et al., (1990) This is not surprising because the implementation of QA is complex and there are many difficulties inherent in implementing and sustaining effective quality programs in hospitals Balding (2005).

The objectives of this review study were: To discuss the QA policies and strategies currently used to implement the QAP in the public hospitals in Sudan. To identify the challenges and obstacles undermining the implementation. To check (1) versus strategies and approaches implemented in other developing countries to come out with feasible outcome to improve the implementation of the QAP in public hospitals in Sudan.

**METHODOLOGY**

It was a review of an existing program. The review was conducted during the period between January 2010- and August 2010. The secondary data collected, (the search is limited to articles after 1990), were reviewed and discussed based on Policy Triangle Framework. The policy triangle was first developed by Gill Walt and Lucy Gilson Walt and Gilson (1994), (Figure1.). It is highly simplified model of an extremely complex set of interrelationship composed of four key areas: the content of the policy, the process of implementation, the role of different actors, and what are the wider issues affecting the policy (context) (Buse and Walt 2005; Mirzoev 2010).

The first component of the framework, the policy content, is to know how the policy is formulated and communicated. The second component, Context, refers to all factors that are not part of the quality improvement program but they can influence the implementation process Ovretveit (2003). Analysis of the context is important to know why policies are not
Table 1. Matrix table summarizing (based on Policy Triangle) different challenges and obstacles influencing the implementation of the QAP in Sudan.

<table>
<thead>
<tr>
<th>Policy triangle component</th>
<th>Situational analysis (key points)</th>
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<tbody>
<tr>
<td>Policy content</td>
<td>1-limitations of the standard based approach not fully addressed</td>
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<td>2-ineffective communication and dissemination of the policy</td>
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<td>Context where policy</td>
<td>1-financial context: (scarcity of resources and economic disparities between states)</td>
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<td>implemented</td>
<td>2-poor technical context</td>
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<td>3-non-supportive contextual culture</td>
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<td>Process of implementation</td>
<td>1-Limitations of Top-down approach has not been addressed</td>
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<td></td>
<td>-One shot implementation</td>
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<td>-the QAP has not been integrated with other systems</td>
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<td>Key actors/persons</td>
<td>QA Key actors:</td>
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<td>-physicians</td>
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<td></td>
<td>-hospitals’ managers</td>
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<td>-directorate of curative medicine</td>
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implemented as planned Buse and Walt (2005). The third component, the processes, refers to the way in which policies are developed, communicated, and implemented Buse and Walt (2005). The fourth component, the Actors, focuses on the analysis of the power of different actors. This is essential to recognize their influence over the development and implementation of health policies Erasmus and Gilson (2008). The components of this framework were used in the situational analysis and also in the discussion of analysis of findings.

The secondary data were collected from different sources through electronic and manual searches. The electronic sources were retrieved through using of different electronic databases including: Global Health, Public medicine (Pub Med), and Cochrane Library. Some articles were identified through hand searches in relevant journals such as the journal of Health Policy and Planning, the International Journal of Healthcare Quality Assurance, and the International Journal for Quality in Heath Care. The 1990 was selected as a start date because the evolving of the QA in developing countries has started in early 1990s WHO (1998). Official documents, publications and reports from FMOH had been retrieved from the official web site of the FMOH.

This study has two limitations; the first is related to the scarcity of literature and studies in the area in Sudan. Nevertheless, literature from different studies conducted in similar contexts had been reviewed. The second is that, the study has focused only on public hospitals. Therefore, its results may not be applied to other private, military, or universities’ hospitals in the country.

Results and Discussion

The federal system was adopted in Sudan in 1994(9). Few years later, the decentralization was introduced as a system of governance (19) in two levels: federal and state level. The first is concerned with policy making, planning, supervision and coordination, while the states’ governments are empowered to plan and implement policies at the state level (3). As mentioned earlier, the notion of having a national QAP started in 2001 when the FMOH established the FQAD. However, after 10 years of implementation the QA policies revealed that it is remained ineffective (20). Based on the Policy Triangle Framework, the obstacles and challenges influencing the implementation were analyzed. (Table 2.)

The Policy Content

Two issues related to the policy content had been analysed: the formulation of the QA policies and how they were communicated. The main focus of the QA policy in Sudan was to produce national standards and guidelines at the federal level by the FQAD Federal Ministry of Health (2007). The target of the FMOH was to implement these standards in 80% of the public hospitals by the year 2011 Federal Ministry of Health (2007).

Following these policies, the FQAD has started producing the national standards and guidelines Federal Ministry of Health (2007). The QA guidelines of the WHO for the developing countries had been used to develop the national guidelines for Sudan Federal Ministry of Health (2008). Implementation of national standards in all public hospitals was noticed to be challenging in two ways: Firstly, producing
same level of standards to be implemented in different states varies greatly in their technical and financial capacities may constitute a challenge for the poorer states Ovretveit (2003). Secondly, the Standards and guidelines Based Approach (SBA) by itself is "a resource intensive approach" Ovretveit (2003). Therefore, its implementation in deprived poor states may be difficult.

Also the communication of these QA policies to lower levels was deficient. They were communicated and shared only with the big federal hospitals and some of the states Federal Ministry of Health (2010). That means most of the states’ and rural hospitals have little or no information about these policies. Lack of information is considered as one of the leading causes of implementation failure of any program at lower levels Spratt (2009).

The Context

Different contextual factors were analyzed, including: financial, technical, and cultural factors. The financial context: the resources allocated for health in Sudan are generally scarce. Moreover, the decentralization which has not been accompanied by the necessary transfers of resources World Bank (2003), has led to inequity and economic disparities and variation in technical capacities between the different states and hospitals in Sudan (Green 2007; World Bank 2003). These two financial factors had created a challenge to implement the same level of the national standards produced by the FQAD particularly in rural hospitals which are lacking basic infrastructure and have poor administrative and planning capacities World Bank (2003).

Secondly, the technical context: it is believed that both the availability and the quality of the staff are critical to implement quality programs Meyer et al., (2004). However, the health workforce in Sudan have been criticized for that they are inequitably distributed in different states. Thus, the implementation of the QAP may face difficulties in remote deprived hospitals, in which retention of technically competent staff that could plan and manage the QAP effectively, is difficult.

The contextual cultures: it was noticed that there are common negative cultural factors shared by the Sudanese healthcare staff. Common ones affecting the implementation of the QAP were the false believes about quality and lack of trust in federal programs (23). Most of the hospitals’ managers may become reluctant in accepting the QAP because they still believe that quality implementation requires abundant resources and sophisticated equipment. In addition, hospitals’ managers in the states look at the federal programs as a political issue rather than a service improvement program.

The Process of Implementation

It is believed that analysis of policy process helps in understanding why the policies are not implemented effectively Walt and Gilson (1994); therefore the QA policy process from its source at the federal level down to the states’ and hospitals’ levels has been discussed.

The national QAP started as a vertical top-down program. The FQAD has produced and distributed the full package of QA manuals and guidelines to the states. The states, in turn, should distribute and implement the program at their hospitals. This vertical approach is claimed to be ineffective for many reasons. Firstly: it has not been accompanied by reallocation of resources (financial and technical) from the federal level to the states as it should be. Secondly: it did not provide enough information to the states and the hospitals on how to implement these documents. Thirdly: the communication between the different levels was not effective. There was no structured system for reporting, monitoring or regular supervision. This verticality has created another problem; different directorates in the states thought that the vertical program (like the QAP) should be managed by the federal level through the State QA Units. Therefore they didn’t bother to take responsibilities in managing the program at the local level. This has led the QAP to be viewed as a stand-alone and non-integrated program. The QA Units in the hospitals were isolated and were not embedded within the hospitals’ management structure.

The Role of the Different Key Actors

It is believed that the influential role of different actors in the implementation is not less important than their role in formulation of the policy Walt and Gilson (1994). Through-out the story of the QA implementation in Sudan, there were three main actors not involved (as required): the physicians, hospitals’ managers, and directorates of curative medicine (DCM).

The physicians and medical professionals have been well involved in the early stages during the production of the clinical protocols Federal Ministry of Health (2010). However, their involvement in the implementation process was
minimal. They were not represented in the QA units; and very few of them have QA management responsibilities in their hospitals. This exclusion may explain the resistance of many physicians to accept rules and regulations of the quality programs (Walt and Gilson, 1994). Besides their clinical professionalism, physicians in Sudan have management roles as top managers or middle managers in their departments.

Secondly: the Hospitals' managers, whether physicians or not, are leaders at their hospitals. Moreover, under the decentralized system, hospitals' managers have some degree of autonomous status in managing their resources and personnel. This is another added power to the hospitals' managers in Sudan.

Despite these different types of roles and powers, hospitals' managers were not well involved in the QAP. This could be attributed to their weak managerial and planning skills; which in turn have led them to keep away letting the QA units' directors to take their roles. Also some of them thought that the implementation of the QAP is not among their priorities (Federal Ministry of Health, 2008).

Thirdly: the DCMs, at federal and state levels, are responsible for managing the public hospitals including: allocations of resources, recruiting of personnel, appointing of managers and other training and planning issues. Their communication and coordination with the QA units at the states were very weak. Even at federal level, the FQAD is not part of the General DCM. Eventually, this has led to ineffective implementation of the QAP in the public hospitals.

Discussion

Discussion was based on the study conceptual frame work components as well. That is, by looking into the literature and discussed how different countries have implemented their QAPs and what measures have been taken to overcome or mitigate the challenges. The feasibility and appropriateness of the different approaches have been discussed in relation to the situation and the context in Sudan (Federal Ministry of Health, 2008).

Policies and Approaches implemented in different countries

There are generally four approaches to improve implementation of quality programs: viz. putting more money in healthcare services, recognition of the healthcare system, strengthening management and choosing a particular quality improvement strategy (WHO, 1998; Green, 2007). The first three approaches are usually overlooked in many developing countries, including Sudan. Consequently, these countries face different policy-implementation barriers like: financial constraints, health systems' issues, and operational barriers (Health Policy Initiative, 2010). The fourth approach which refers to the particular quality improvement strategy is the main focus in many developing countries intending to implement QAPs. These like: Standard Based Approach (SBA), problem solving approach and accreditation system. No single strategy is proved to be effective; a multi-intervention approach is likely to be the most effective (Ovretveit, 2003; Eggli and Halfon, 2003). As noted earlier, SBA has been chosen by the FQAD as an approach for the QAP implementation in Sudan; this approach may not suit country like Sudan because it is resource intensive (Ovretveit, 2003; Eggli and Halfon, 2003). Also it is considered as an individual-oriented type (Eglli and Halfon, 2003; Alexander et al., 2006). Therefore, just focusing on this type and ignoring the other ones (organizational-oriented) was considered as one of the limitation of the implementation of the QAP in Sudan.

Despite these limitations, the SBA is a popular approach and it is implemented in many countries. Effective implementation of this approach in many developing countries have been achieved following consideration of reallocation of resources from other programs or implementing flexible standards that can suit contexts with minimal infrastructure (WHO, 1998; Green, 2007).

Financial context and resources

It is not necessary that presence of extra resources means high quality, however the evidence shows that scarce resources affect quality implementation (Ovretveit, 2003). Different economic approaches have been tried in different countries to ensure effective implementation of their QAPs. The commonest ones are:

1- re-allocation of resources from central levels (Green, 2007);
2-Integration of the QAP with other directorates in the MOH; like Seri Lanka, or through collaboration with universities or education centre as in Chilli.
3- attracting external funds to build the programs (WHO, 1998).

Regarding the availability of trained human resources, collaboration with the available universities and training institutes have been implemented in many countries. This ensures not only enough numbers of trained personnel but also will play a role in changing the current negative culture about quality (Carman et al., 1996).
To guard against decentralization challenges during implementation of a national QAP some developing countries provide central financial and technical support to the regions and districts like Jordan and Costa Rica WHO (1998). In Sudan, the implementation of the national QAP through providing central governmental support from the FMOH could be possible and feasible particularly from some funding projects which consider empowering of the states as one of their main objectives (Federal Ministry of Health 2007; Boan and Funderburk 2003).

In addition to these approaches, some managerial issues like: the role of leadership, reorganization, and strengthening of management need to be considered Ovretveit (2003). Therefore, equipping hospitals’ managers with leadership skills; integration of the QA system within the hospital systems; and promotion of cross-functional and multidisciplinary teams are main keys in facilitating QA implementation (Ovretveit 2003; Boan and Funderburk 2003; Bradley et al., 2003).

**Contextual Culture**

There is no recipe or single formula for achieving culture change. However, certain programs seem to support a culture of quality. However, continuous learning culture among the staff may create greater quality output Carman et al., (1996). Therefore, the quality culture needs to be made as an integral part of the basic professional education Boan and Funderburk (2003). Sudan may require a long time and great efforts, designing of special training programs for leaders, and allocation of resources.

**Processes of Implementation**

National country-wide approach, like what implemented in Sudan, is highly acceptable and widely implemented in many countries, like Lebanon, Jordan and United Arab of Emirates WHO (1998). However, its success is based on high commitment from all levels and regular reviews to introduce changes where and when needed WHO (1998).

This country-wide program is implemented in top-down approach. This has two advantages: focusing on one program and its ability to attract specific funding Green (2007). However, communication problems, lack of local control, and non-integration of the program with other management systems are considered as the main disadvantages (Green 2007; Hunter and Vienonen 1998). Therefore, effective coordination between different levels, communication, and allocation of resources and personnel are essential Buse and Walt (2005). Walt stated that “the ability of the centre to pay for a particular program is a powerful inducement for the lower level authorities to follow central policies” Walt and Gilson (1994).

Gradual implementation of national and country-wide programs was noticed to be efficient in many countries. Since it is very hard for the developing countries to implement the complete package of the QAPs in one shot, many countries are using the problem-oriented gradual approach to implement their QAP. Usually they start with their top priority quality issues like: infection control and clinical protocols or by focusing on the tertiary clinical care or maternal and child care WHO (1998). Eventually the problem-oriented approach, if continues gradually, will lead to a comprehensive implementation of the QAP Ovretveit (2003).

**Physicians and hospitals’ managers as Key actors**

Physicians can influence the implementation of the QAP through both their professional power as well as their managerial roles Balding (2005). Two issues to be considered: involvement of physicians in quality programs; and offering them training to enable them to take their responsibility in moulding teamwork and setting direction for their departments Berwick and Nolan (1998).

Since the DCMs are responsible for the allocation of resources, distribution of personnel, and appointing of hospitals’ managers Federal Ministry of Health (2008), their involvement in different processes of the QAPs becomes crucial. Experiences from some developing countries reflect that the responsibility of the QAP comes directly under the DCM WHO (1998).

**Conclusion**

The implementation of the QAP in public hospitals in Sudan is facing different challenges and obstacles. However, most of these challenges are amenable to change within the country’s financial and technical capacity. The system needs to be strengthened through establishing specialized committees at federal, states’ and hospitals levels. Gradual
implementation of the QAP in phases starting by tertiary and priority areas in the healthcare quality and patient safety. To insure sustainability of the program, allocation of resources and institutional training program is recommended.

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