Institution of quality management in Moroccan hospitals: "Case of Ibn Sina University Hospital Centre of Rabat"

Youssef el Hani[1]*, Leila Radi[2], Fatima Bouazza[4], Najat Mahassini[3] and Abdelkarim Filali-Maltouf[1]

[1]Laboratoiry of Microbiology and Molecular Biology, Faculty of Sciences, University Mohammed V-Agdal, 4 Avenue Ibn Batouta, B.P. 1014 RP, 10100, Rabat, Morocco.
[2]International Quality Control Corporation (IQCC), PO Box 3719, Mount Vernon New York 10553, USA.
[3]Faculty of Médecine and Pharmacy of Rabat, University Mohammed V-Souissi, Av. Mohamed Belarbi El Alaoui, B.P. 6203 Rabat, Morocco.
[4]Faculty of Sciences, University Mohammed V – Agdal, Rabat National Institute of Hygiene, Laboratory of medical Bacteriology, 27, Avenue Ibn Batouta- Rabat, Morocco.
*Corresponding author. E-mail: youssef_qmss@hotmail.fr.

ABSTRACT

The work aims to analyze the modalities of implementing quality management in the Academic Hospital Center Ibn Sina (CHIS) of Rabat in Morocco and to identify quality sustainability factors management in services involved in the process. The study focuses on 21 Medi-cotechnical and Administrative Services of the Academic Hospital Center (CHIS) that joined the governmental program in implementing the quality process from 2007 to 2011. Semi-directive interviews were conducted for those involved in the service and quality approach management. The interviews were held with a representative sample of sufficient staff. In total, 51 people were interviewed: 9 doctors, 16 health professionals, 14 technicians and 12 administrative staff. On November 30th, 2011, four years after the launching of the program, six services (29%) had an active quality approach and 15(71%) had none. The survival average period of quality circles was 17 months and the median was 12 months. In 70% of services, quality circle works or functions as a place for co-ordinating the quality approach. Quality circle is seen as a forum for the exchange of ideas (views) and as a means of expression for all personnel. In all meetings, it helps to create new links between professionals and deepens the concept of communication and consolidation (or harmonization) of functional relationships between different departments. It has been a major factor in decompartmentulizing teams and introducing a certain collegiality in service operation. In several services, quality circle has proved to be the only place for exchange and discussion between staff.

INTRODUCTION

Impressed by the technological revolution and economic leap made by the Japanese, researchers and experts from industrialized countries as well as those from emerging countries have been acting tirelessly for more than a decade to deepen the practical concept of quality and participation, in a competitive economic environment.

It has been proven that quality is an undeniable imperative essential for the integration of a company in any competitive strategy if it intends to achieve an expansion of its operations, increase its profitability and comfortably position itself in the market.

Parallel to the anchoring concepts of quality, a participatory approach was developed within the company. This approach, that aptly suits the requirements of a healthy competition and personal expectations, has resulted in the creation of "quality circles" in workshops and factories. These quality circles, formed by voluntary groups, analyze management modes, production systems and propose possible solutions for improving the quality of products and services and at the same time motivate more staff.

Like other countries and in the field of health, Morocco has seen the arrival of these groups (participatory groups) towards the end of 2006 through a partnership between the Ministry of Health and the World Health Organization (WHO). They aim to mobilize the whole staff in an effort to achieve total quality.

Ibn Sina Hospital (CHIS) in Rabat, Morocco has opted for a continuous quality improvement (CQI) based on employees' participation in multidisciplinary working groups within the framework of quality circles, using problem solving tools (Moss et al., 1998; Berwick et al., 1992). The implementation of quality circles was made at the Medico-technical and Hospital Administrative Departments of the Ibn Sina Hospital (CHIS). This method of implantation is not transversal covering the whole hospital; instead, it is adapted to highly segmented organization of the institution. This approach has set goals for itself to train professionals and engage them in quality management activities of their respective working structures (Townes et al., 1995; Stern et al., 1996).

The program was proposed in Medico-technical Departments of CHIS through a circular issued by the Quality Management Program Institution (Circular No. 34/07). The intervention included: a training seminar, the establishment of a management structure, monitoring of the different CHIS hospitals and providing a methodological support.

Program assessments (oral and written) within the frame work of 2010 quality competition were performed in services that have integrated the program two years after the intervention. Some objectives of the intervention were achieved; however, it is immediately highlighted that repeated assessments over time are needed in order to assess the sustainability of the process. The main objective of this study is to assess the sustainability of quality management activities in the program integrated services to identify factors that have contributed to the pursuit of quality initiatives in some services and their interruption in others.

The quality approach context in CHIS

Quality management is one of the strategic actions listed in the hospital reform initiated by the Ministry of Health. In this context, CHIS was initiated in November 2007, an ambitious program which aims to institutionalize quality management in CHIS annexed. This program was planned in two steps: the first step concerned theoretical contributions to raising awareness of head-doctors and head teachers and the formation of quality referents which are suitable for each institution. More operational, the second step is devoted to the implementation of quality approach in the CHIS, notably the institutionalization of the Quality Management Program (QMP), a description of the Quality Operational and Strategic Committees Organization (QOC and QSC, respectively) and Quality Management Unit at Ibn Sina Hospital Directorate (DCHIS) which specifies their tasks and responsibilities.

To improve the national quality of care, services and prepare for medium-term accreditation, the program aimed to amend four priority projects, namely, hospitality, hygiene, patients' records and the medical biology laboratory. These sites which are piloted quality reference within hospitals have been backed up by the management, a mid-term of concepts and approval of tools to determine each institution's level of commitment in the quality approach and identify possible improvement actions to be taken (Revue du Centre Hospitalier Ibn Sina, 2008).

To further ensure success, CHIS has adopted a policy of modernization of management tools, mainly through the introduction of quality management, giving priority to training and involving employees in the management of the center.

MATERIALS AND METHODS

Study outline

This is a qualitative study carried out by interviewing professionals who are involved in the quality process of services in affiliation to the Quality Management Implementation Program since 2007.

Population

This study was conducted in a university hospital with a capacity of 2816 beds, employing 6239 people and offering a full range of health care (Mills and Weeks, 2004).

The study was conducted on 21 services which were involved in the quality management program between 2007 and 2011. Semi-structured interviews were done for the people involved in the service quality approach management (Doctors, Head of department, pilots and members of the quality circles). A ratio of one to three people per service was interviewed, depending on the availability and content of those first interviewed. In total, 51 people were interviewed: nine doctors, 16 health professionals, 14 technicians and 12 administrative staff.

Data collection

The semi-structured interviews were conducted face to face in the presence of different interveners, using a questionnaire designed according to the European Foundation of Quality Management (EFQM) and ISO9001v2008 (Edmond, 2003; Scott et al., 2003; Mills and Weeks, 2004; Maguerez, 2005; Alexander et al., 2006; Weiner et al., 2006; Décret, 2007; Revue du Centre Hospitalier Ibn Sina, 2008; Norme internationale, 2008).

The questionnaire was administered to patients in another university hospital. After its validation, it was applied on CHIS. The questionnaire focused on the motivations of the interviewed persons as well as other members of the service towards service commitment. It focused also on quality management activities in terms of the reasons for the pursuit or interruption of these activities, the difficulties confronted and the favorable factors.

Methods of analysis

The interviews were analyzed thematically. They consisted of manually grouping together significant elements of the questionnaire, according to predefined themes: leadership, motivation, resource management, the structuring process, managerial and socio-cultural environment, difficulties, sustainability factors, modality of implementation and overall confronted performance.

RESULTS

The actors' positioning and leadership approach

Beyond their initial decision to enrol their service in the program, the position of heads of departments varies and could be described in three levels: participation, benevolence and distance. In 57% of the participating service departments, heads are personally involved in the process and have sometimes been charged with the function of quality referent. According to them, it was necessary to set an example and to make quality process a service management tool. This attitude was reflected in all departments where quality approach was still applied at the time of the study. All interveners recognized that the involvement of heads of departments is an important factor in their commitment. In the departments (24%), the heads of departments were involved in the initial phase of implementation of the approach, but now they are no longer directly involved. However, a good follow-up of the approach was assured at meetings of the board or the department's management. In 19% of the department, the heads of department have never been personally interested in the quality process, which they entrust to a health care professional. Their absence from quality circle meeting denotes their lack of interest in the process, from which they keep their distance. All these services have quickly abandoned the quality process, and the heads of department should assume

the political leadership of the quality approach. They have been recognized as an example and guarantor of team cohesion. Whatever the position of departmental heads, they are the quality referents who lead the approach in all teams.

Sustainability of quality circles

The problem solving approach is based on the systematic analysis of all aspects of problems (malfunction, non-quality etc.) in progress group, and especially where there is no survey, early choice or preconceived solutions are used.

This participatory approach has led to the emergence of leaders who were able to conduct their work group. Indeed, in these groups, balance is given to human resources in general and joint work in particular, taking into account that "quality is a share enterprise and that everyone's ideas must be heard, as participation, initiative and creativity of each working group provide the synergy necessary for the continuous progress of the process (Edmond, 2001).

In November 30th, 2011, four years after the program launching of, six services (29%) had an active quality approach and 15 (71%) reported having stopped the latter. The average survival duration of Quality Circles was 17 months, while the median was 12 months. The quality circle was seen as a place of exchange and expression for all staff. During the meetings, it helped to create new links between professionals and to transform interprofessional relationships. It was a factor for team decompartmentalization and introduction of some collegiality in the functioning of services. In many departments, the quality circle proved to be the only place for exchanges and discussions among staff.

In 38% of services, quality circles did not meet; while officials reported that they persisted in the activities of quality management. Working groups were established to address malfunctions or draft procedures. These activities were seen by the interviewees as an official continuation of the quality approach.

Difficulties

With regard to the causes that lead to the stoppage or suspense of the quality approach in departments, interviewees mentioned various reasons that can be classified into two categories according to whether it is exogenous or endogenous to the department. The most cited external

difficulty came from the management of the hospital which was not interested in this quality approach. Indeed, lack of incentives and recognition efforts has demotivated some teams. Another external factor was lack of time devoted to the quality approach. Staff became aware of the fact that this activity required an investment in time and that they would not accept to take it out of their private time. This problem has been greatly exacerbated by the payment law constraint on guards (Décret, 2007). First, by a direct effect, teams have had to sacrifice the "collective time'': inter-teams transmissions, meetings and trainings. Then, in a more symbolic way, officers were troubled by the fact that it reduced staff resources and refused to align with the regulations, which provided financial compensation per surveillance unit instead of recovery in rest days. This led services to deplete the morning and afternoon teams in order to reinforce the nocturnal teams who must meet a night guard rolling of 12 h/36 h while seeking quality improvement. This paradox was not welcome and it was a source of demoralization and even rejection of the quality process.

   The last group of external cause was the 2010 quality competition, in which services that have integrated the quality approach did not receive any inciting or encouraging reward for the actors of the approach. Similarly, winning services did not receive their merit awards as at a year later.

   Thus, the quality competition awaited by many of the participants for recognition of their efforts which should be emulated had the opposite overall effect.

   The internal cause was the departments were dominated lack of involvement of the medical staff. Doctors have participated in seminars and agreed to integrate quality approach, but most of them have relied on health executives and have not tried to mobilize their colleagues. Another internal cause of staff demotivation was the lack of any direct benefit in recompense for their investment. Teams whose actions have gone further are those who focus on specific targets and concert problems and have developed practical solutions to solve them.

Factors associated with the sustainability of the process

Invited to quote three success factors and three obstacles to the sustainability of the quality approach in their services, interviewees have expressed 201 proposals. To analyze the received proposals, we codified each proposal according to its field, and then we have grouped together the various proposals in theme and sub-theme. The proposals have been classified into six themes or fields (Table 1).

   The largest number of proposals concerns the motivation of the entire staff for the quality approach. Motivation was related, for many, significantly to the involvement of the management and

the leadership of quality approach in the committed departments. The commitment and direct involvement of heads of departments appeared to be a prerequisite.

Directly related to the concept of motivation was the issue of the necessary resources to be invested in the quality approach. Lack of staff and time, excessive daily work, accumulation of tasks and lack of teaching methods for implementing the approach have been obstacles to the organization of meetings for considering and implementing actions for improvement and sustainability of the process. A large number of proposals fell within the quality process itself in the way it was implemented and in its proper characteristics.

Thus, interviewees have stressed the need to highlight the timeliness and reliability of the process, and this is used to seize the real problems of the team which may receive solutions for improving the quality of care and working conditions.

The quality management required also skills in group liveliness and methodology that were not always available in services. Some called for dedicated staff, while others have emphasized the need for methodological external support. It is necessary also to deal with constraints in the process: the need to meet people involved regularly, the need to draft documents, the need to know how to overcome formalism and need to question.

Table 1. Identification and analysis of proposals relating to the sustainability of the quality approach.

Theme	Code	n'	Proposal	Code	n"
Motivation: Involvement of management - Leadership, motivation for the approach, work motivation, involvement of physicians	MO	45,77% (92)	Management involvement, Leadership, motivation for the approach, work motivation, involvement of physicians	MO1	29
				MO2	29
				MO3	23
				MO4	06
				MO5	05
Management of resources: Human, material logistics	MR	21.39% (43)	human, material, logistical	MR1	14
				MR2	26
				MR3	3
Quality management: Methodological competence, recognition, management structure cross	MQ	14.43% (29)	methodological competence, recognition, management structure cross	MQ1	15
				MQ2	6
				MQ3	8
Managerial environment: Culture of the establishment, implementation modality,	EM	7.46% (15)	culture of the institution, mode of implementation,	EM1	10
				EM2	5
Sociocultural environment: Team culture, inter-relationship	ES	7.96% (16)	team culture, inter-relationship	ES1	11
				ES2	05
Performance: Quality objectives, planning, quality policy	P	2.99% (6)	quality objectives, planning, quality policy	P1	03
				P2	02
				P3	01

n': number of proposals made by all respondents, grouped by theme ; n": Number of proposals by all respondents grouped by categories proposals.

The implementation of the quality was influenced by the socio-cultural team environment and the modes of inter-professional relationships. There was this agreement to promote the professional multidisciplinary approach by developing cooperation and sharing responsibilities. It was also about common goals that constitute the team project. Socio-cultural barriers of this "participatory" culture were to multiply the decompartimentalization and individualist qualified behaviours; others also cited a loss of hierarchical authority and sense of responsibility. Finally, it was demanded of the establishment as a whole to develop a serving culture to users and to deal with cross faults such as the problems located at the interfaces between structures such as the management of non-conformities, the patient circuit etc.

DISCUSSION

This study shows that the quality management implementation program in Moroccan hospitals has aroused the interest of professionals and that most departments have involved their steams in the process. However, the sustainability of this commitment has been low. The average survival period of quality circles is about a year and half. This assessment has led to issues, which are, on one hand, a part of the nature of the program, and on the other hand, a part of the socio-cultural and managerial environment of its implementation.

Our program meets the principles and theories of continuous improvement in quality problem solving as defined by Shortell et al. (Shortell et al., 1995):

(1) Close attention setting was given to organizational processes and systems as causes of failures;

(2) The use of structured methods of problem solving;

(3) The establishment of multidisciplinary working teams;

(4) The empowerment of staff;

(5) The explicit reference to external and internal customers.

However, it does not have all the features of total quality management which assumes a systemic approach involving the whole organization and crossing the barriers of job and internal structures (Ovretveit, 2000; Berwick, 1998; Wakefield and Wakefield, 1993; Chassin, 1996). This program is an internal process for each department; it crosses the boundaries of occupations but not those of the structures. Some experiments of this implementation strategy of the QCA in tertiary care

university hospitals have been reported in literature, showing their ability to involve professionals and to obtain conclusive results in terms of improved performance and reduced costs (Townes et al., 1995; Stern et al., 1996; Clemmer et al., 1999).

The information gathered during dozens of interviews led us to distinguish two main types of goals that underlie the action of quality circles in CHIS hospitals. As a benefit, we can say that quality circle is a forum that helps to improve the social side, namely improving interpersonal skills through the development of communication between the different categories of agents; improving operational skills through a fruitful exchange of ideas and experiences in the field; improving the working environment and input of the managerial skills; popularizing cooperation and participation in the department notion.

In addition, quality circle can discuss socio-economic or structural issues and propose solutions to track malfunctions. Studies conducted by Chandler (1962) proved that attachment to the formal structure is done through the management of human resources in the first case and through the management of quality service in the second case. The latter is also established on real functional service in most cases.

The evaluation shows that the structure of the quality process was in place in all piloting departments; the departments worked effectively to analyze and solve service problems. Professionals, involving in and collaborating multidisciplinary working teams, were attracted by the problem-solving approach and were willing to invest in improving the processes in which they were daily involved. In this sense, the intervention is similar to the collaborative projects model (collaborative projects) or a quality quick improvement projects that rapidly improve quality which focuses on problems, sets quantifiable targets and tests improvement actions by measuring their immediate impact via indicator monitoring (Maguerez, 2005; Mills and Weeks, 2004). However, it turned out that the responsibility of the quality circles program is given to a person who is the quality referent, and not to transverse service. This explains that the short lifetime of quality circles by the latter after installation is set to "freewheel" without real control by the hierarchy. Implementation modalities of the approach are inconsistent with the dynamic strategy-structure of Chandler: modes of integration of quality circles in the formal structure are dependent on the priorities assigned to them by the management. The objectives of the circle ensue from orientations and priorities of the institution which were clearly expressed by the management. A real planning process took place with the coordination of quality service which was represented at all levels of the important establishment, through the delegates or the corresponding quality.

Results obtained show the need for a functional department to report directly to the top management and be responsible for quality circle program. This must be followed by the establishment of a formal quality planning, from which emerges almost each year an annual quality plan. The annual quality plan should be developed in harmony with the policy priorities defined by the management of the establishment, and its commitments that are in line with each hierarchical level in terms of quality must be taken. This planning system ensures a constant renewal of the quality circle's main raw materials which are processed.

Among the elements that are favourable in the implementation of QCI, all studies and authors point out that the commitment of the management must create an organizational and favourable culture to quality programs, develop a supporting tool with incentives and provide expert human resources and budgets dedicated to quality (Shortell et al., 1995; Lee et al., 2002; Maguerez, 2005). A study conducted by Shortell et al. (2006) in 61 U.S. hospitals showed that QCI approaches are implemented more easily in smaller institutions that have adopted an organizational and participatory culture, which is flexible and allows risk taking. Lee et al. (2002) showed that the level of implementation of QCI in Korean hospitals is favoured by a team work culture based on personal accountability and institutional support with a transverse support for structure teams and specific budget. Our work is consistent with what is obtained in the literature because it took place in an unfavourable environment (the hospital environment as well as the socio-cultural condition of the work groups). Several years of budget cuts (non- paying staff represent 60% of the total billing in 2009 and more than 80% of the annual operating subsidy of the state is absorbed by payroll) (Al Mountacer et al., 2011) have led to shortage of means particularly vis à vis the health care personnel. This situation was aggravated by law relating to custody and strain (Décret, 2007).

The question of leadership quality approach also appears to be a central factor of sustainability. The commitment of heads of departments and their active involvement in quality management are identified by all as a necessity (Scott et al., 2003).

It is equally necessary that the process be brought within the department by leaders who are recognized by the staff.

We have seen that the function of operational leadership is most often assumed by healthcare executives whose involvement in the quality process can help to strengthen their position and enhance their previous investments in the field of management (Briand et al., 2001). Although, this commitment of health executive faces passive resistance of the medical staff who are not prepared to function as leaders and whose primary role is to create favourable environment for the

development of quality improvement (Berwick and Nolan, 1998; Shekelle, 2002). Several studies have shown a correlation between the implementation of quality management in clinical areas and the involvement of doctors who are leaders in the process (Ovretveit, 1996; Weiner et al., 2006). Doctors must learn to work in teams and acquire new skills in management and leadership (Briand et al., 2001).

The evaluation of the program concluded that hospital professionals were willing to engage in quality initiatives by using the model that was proposed to them. However, the internal difficulties within services and constraints of the hospital environment demotivated the staff. The study of these problems can retain the sustainability factors of the quality approach, which include an active involvement of the management of the establishment which must recognize, support team efforts and provide methodological external support; commitment and effective involvement of the head of department who must assume the political leadership of the process; a joint commitment by health officials and doctors who must assume the operational leadership of the process, the full integration of time dedicated to management of quality in working time and the creation of a transversal structure directly related to management, responsible for quality management followed by the establishment of a formal quality planning, from which emerges almost each year an annual quality plan.

CONCLUSION

The implementation of quality management in health care is difficult in the service in the absence of institutional support and the establishment of a formal process of quality planning. Leadership in services plays a major role in the sustainability of the approach and the adhesion of doctors remains an important challenge, for the approach can induce changes in the hospital.

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