

Staff Perceptions of Obstacles to Quality Management Systems in Low- and High- Performing Hospitals in Jordan

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Abstract

Implementing a quality management system (QMS) is important for hospitals to deliver high-quality services. Hospitals in Jordan vary greatly in terms of the quality of their services. This study aimed to explore QMS obstacles in low- and high-performing hospitals in Jordan. The study employed a Mixed Method-Sequential Exploratory design. A questionnaire was used to explore the QMS obstacles. The study population was drawn from six public and private hospitals considered low- and high-performing. A total of 908 participants who worked in the six hospitals completed the questionnaire. The questionnaire contained 23 items and was rated using 5-points Likert Scale. The data was analysed using quantitative tools as Descriptive statistics, General Linear Model (Univariate analysis) to determine the major QMS obstacles in low- and high-performing hospitals and to explore the relationship between participants' background variables. The study found that low-performing hospitals faced six major obstacles: lack of rewards for hospital staff, inadequate material resources, lack of training programmes in sufficient staff motivation, insufficient budget for a QMS, and inadequate authority delegation. Whereas, the high-performing hospitals faced three major obstacles: lack of rewards for hospital staff, inadequate authority delegation, and shortage of staff. The results showed that there were significant differences between low- and high-performance hospitals in terms of the QMS obstacles. The study also provides recommendations for improving the implementation of QMS in Jordanian hospitals.

Keywords: obstacles, quality management system (QMS), low- and high-performing hospitals

1. Introduction

A hospital's Quality Management System (QMS) is defined as the 'procedures explicitly designed to monitor, assess and improve the quality of care in a hospital' (Wagner, Gulacsi, Takacs, & Outinen, 2006, p. 2). Implementing a QMS, which is an essential component in the development of a contemporary approach to quality management, can help hospitals create and implement procedures that improve patient and employee satisfaction.

The World Health Organisation (WHO) (WHO, 2008a) asserts that QMSs enhance management, allow more effective organisation, improve quality of services, increase staff satisfaction and commitment to the organisation, enhance co-operation among employees and management, and improve patients' satisfaction. For these reasons, hospitals in most countries including Jordan are constantly trying to improve their QMSs. Maintaining quality requires that every hospital should have a QMS that covers domains such as leadership and management, resource management, quality improvement, and organisational culture (Lin & Jang, 2008; Pongpirul, et al. 2006). In the past, most hospitals had their own criteria for a QMS. However, in recent times the Joint Commission on Accreditation of Health Care Organisations (JCAHO) and the International Organisation for Standardization (ISO) have started using specific standards for a QMS as a basis for accreditation.

The main providers of care services in Jordan are Ministry of Health, Army Medical Services, university hospitals and the private sector. The Ministry of Health (MOH) is the major provider of health care services for all population. There are 31 hospitals owned and operated by the ministry (MOH, 2010). The Army Medical Services offers medical services for army personnel and their families through 11 hospitals. There are two university hospitals that provide services to students, university staff, and the public. The private sector plays a

significant role in providing and financing health care services through 61 hospitals, concentrated mostly in the province of the capital (MOH, 2010).

Jordanian Health Care Accreditation Council (JHCAC) was created in 2008 as an independent organization to ensure that hospitals meet standards and demonstrate high level of service quality. Hospitals in Jordan try to ensure that they maintain the standards set by (JHCAC) and international bodies in order to introduce a high quality services.

1.1 The Problem of Study

Many Jordanian hospitals face challenges as rising health care costs, reduced support to hospitals from the government due to the declining gross domestic product (GDP), and inefficiencies in the financing and provision of health services (Jordanian Department of Statistics (JDOS), 2010; Jordanian High Health Council, 2012). To some extent, these deficiencies are being addressed in most Jordanian hospitals through the implementation of QMS (Jordanian High Health Council, 2012). However, it is unclear how these hospitals apply their QMS processes. The researchers are not aware of the existence of previous studies to assess the effectiveness and barriers related to QMS in Jordanian hospitals; it is timely for this area of the hospitals' operations to be researched.

1.2 Aim of Study

The aim of this study was to explore the obstacles facing the implementation of QMS in low- and high-performing hospitals in Jordan. The exploration of these obstacles is important because it is expected to: produce reliable information that can help hospitals deal with these obstacles and implement QMS successfully; improve the effectiveness and efficiency of hospitals' performance; and meet patients' needs and expectations.

1.3 Research Questions

1. What are the major obstacles facing implementation of QMSs in low- and high-performing hospitals in Jordan?
2. Are there differences in QMS obstacles between low- and high-performing hospitals in Jordan?
3. What is the effect of the health sector (private or public) on participants' perceptions of obstacles to QMSs?
4. What are the effects of demographic characteristics (gender, age, profession, education level, department, work experience in the hospital, and work experience in the health field) on participants' perceptions of obstacles to QMSs?

2. Literature Review

Though it is evident that a QMS is useful and leads to positive hospital performance, there are some obstacles that may hinder the successful implementation of a QMS and should be addressed by hospital management. Studies from many countries as reported by Ajlouni, Dawani and Diab (2015), Wanjau, Muiruri, and Ayodo (2012), Dixon-Woods, McNicol, and Martin (2012), and Bhat and Rajashekhar (2009) have shown varied types of obstacles to QMS implementation in healthcare organizations. This section of the review will look at the obstacles to a QMS as uncovered by these studies. Ajlouni et al. (2015) in a recent study about challenges that hinder home health care (HHC) services in Jordan reported that shortage of qualified staff, lack of governance and regulation, poor management, unethical practices and lack of referral systems were the main obstacles for implementing QMS by (HHC) agencies. The study indicated that these obstacles had negative effects on the effectiveness, efficiency, equity and quality of services and should be addressed by health policy makers. Wanjau et al. (2012) in their study about exploring factors affecting provision of service quality in the public health sector in Kenya reported that low employees' capacity, inadequate technology adoption, ineffective communication channels and insufficient financial resources were the main obstacles to effective implementation of QMS in hospitals. These obstacles were found to affect health service quality perceptions, patient satisfaction and loyalty. Dixon-Woods et al. (2012) analysed and evaluated reports relating to five Health Foundation improvement programs in the United Kingdom. The authors identified key challenges that health organisations face as: over-ambitious goals; data collection and monitoring systems; organisational context; lack of employee engagement; culture and capacities; relying on the inherent inspirations of employees for quality development; leadership; securing sustainability; and side effects of change. Bhat and Rajashekhar (2009) conducted empirical study of barriers to QMS implementation in Indian hospitals. The findings of the study pointed out the following obstacles: resistant to change; lack of benchmarking; lack of planning for quality; lack of customer orientation; lack of total involvement; lack of resources; and lack of management commitment.

3. Method

3.1 Hospital Population (Sampling of Hospitals)

For the purpose of this study, the researchers decided not to include Army and teaching hospitals because they have specific characteristics and specific missions that may hinder generalization of the findings. Therefore, the hospital population included in this study were 92 hospitals (61 private hospitals and 31 MOH hospitals) as reported by MOH at the time of the study (MOH, 2010).

Because there were no objective data in Jordan to rate hospitals as low- and high-performing, the rating was determined by an Expert Reference Group (ERG). This method is usually used in when there is no enough information on specific phenomenon. The United Kingdom for example, uses an expert reference group for high-impact policy changes (Shaw, 2008). In this case, the ERG consisted of three experts who have senior positions in MOH and three academic experts who hold PhD and work in the health academic departments at Jordanian universities. Members of ERG also had proficiency in management and quality and were familiar with and knowledgeable about the health situation in Jordan.

Members of the ERG were provided with a list of the 92 hospitals with enough information about each hospital including accreditation status. They were asked to classify each hospital as high performing or low performing based on hospital's inputs, processes, and outcomes. Members were also given the choice not to classify the hospital if they feel they do not have enough evidence and thus mark the hospital as not classified. A hospital which was classified as high-performing by at least four members of the ERG was put on high performing list, while a hospital which was classified as low-performing by at least four members of the ERG was put on low performing list. From each list, the researchers randomly selected three low-performing and three high-performing hospitals for the study.

3.2 Study Population (Sampling of Hospital Staff)

The study population consisted of all staff working in the six hospitals namely doctors, nurses, allied health professionals and administrative staff. From this population 1200 employees (200 for each hospital) were chosen to answer the study questionnaire. Those participants were supposed to meet specific criteria: had at least a diploma certificate and had a minimum of three years' experience in the hospital. These criteria resulted in recruiting participants who had knowledge about obstacles in their areas of work and in-depth information about the hospitals in which they work. For each hospital, number of participants in each staff category was determined proportionally and the questionnaire was distributed randomly among the staff in each category.

3.3 Instruments of the Study

A pre-structured questionnaire was used to explore the QMS obstacles in Jordanian hospitals. The questionnaire was based on the Quality Management Systems Obstacles Scale (QMSOS) which was built based on a comprehensive literature review of QMS and several survey instruments. The questionnaire is consisted of a list of the most common 23 concepts derived from various studies (Desai, 2010; Dixon-Woods et al., 2012; Hudelson et al., 2008; Lin & Jang, 2008; Pongpirul et al., 2006; Rad, 2005).

This questionnaire is divided into two sections- A and B. Section A includes demographic variables of participants such as gender, age, profession, education and experience in the hospital. Section B has 23 statements, with a 5-point Likert scale response options from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*). The statements in the questionnaire were made in positive and negative forms. As there is no cut-off point in the literature regarding classifying the QMS obstacles, the study considered that items with mean scores from the upper-midpoint limit of the 5-point scale (3.5 or above) are major obstacles. Mean scores between 2.5 and 3.5 are moderate obstacles and mean scores of less than 2.5 are minor obstacles.

The questionnaire was translated to the Arabic language by an English–Arabic translator. The questionnaire was translated again into the English language by another translator to be sure that the Arabic translation was accurate. The questionnaire translation process was based on Brislin's approach, 'translation and back translation process' (Brislin, 1986, p. 39).

3.4 Pilot Study

Prior to distributing the questionnaire to participants it was sent to six management and quality experts for review and to provide suggestions for improving the validity of the questionnaire. During the pilot study the researchers distributed the questionnaire among 40 hospital staff in each high- and low-performing hospital on two occasions to confirm the reliability of the questionnaire. The questionnaire statements were subjected to reliability analysis on both occasions and the analyses showed Cronbach's alpha values of 0.79 and 0.83

respectively. According to Reynaldo and Santos (1999) a Cronbach alpha value of 0.70 is adequate for research.

3.5 Data Collection

Letters of invitation and questionnaire packages were sent to hospitals. The participants were required to drop the completed questionnaires into a locked box in the human resource department in each hospital to preserve anonymity. The researchers collected 908 completed questionnaires from the six hospitals with a response rate of 75.7%.

3.6 Data Analysis

Data were analysed using the Statistical Package for Social Scientists (SPSS) programme. Before the analysis, the coding for the negatively-worded items of the questionnaire was reversed. The study used descriptive analysis (mean frequency, standard deviation) and inferential statistics (T-test and the GLM Univariate Analysis of Variance). Factor analysis was also carried out and this yielded five main factors: leadership and management, material resources, human resources, vision and change, and communication. Factor 1 contained 8 items/statements, Factor 2 contained 5 items/statements, Factor 3 contained 4 items/statements, Factor 4 contained 2 statements and Factor 5 contained 3 statements.

4. Results

4.1 Characteristics of the Study Population

The results in Table 1 show that in high performing, hospitals there were more female participants (58.1%) than male participants (41.9%). Participants in the age range of 20 to < 30 constituted the biggest group (44.6%). About half of the participants were nurses (51%). About half of the participants were bachelor degree holders (45%). The participants who have 3–<6 years' experience in the hospital constituted 53.9% of the study participants.

In low-performing hospitals, the table shows that the percentage of females (63.9%) is nearly double that of males (36.1%). The age group 30-<40 years old was the biggest (34.7%). Based on education, the Bachelor group was half of the participants (50%). About a third (34.7%) of the participants had experience in the hospital 6 - < 11 years.

Table 1. Frequency and percentages for the participants' characteristics in high- and low-performing hospitals

Characteristics	Groups	High-performing		Low-Performing	
		Count	%	Count	%
Gender	Male	203	41.9	151	36.1
	Female	281	58.1	273	63.9
Age	20 - < 30 years	216	44.6	90	21.2
	30 - < 40 years	151	31.2	177	41.7
	40 - < 50 years	85	17.6	124	29.2
	50 years or more	32	6.6	33	7.8
Profession	Nurse	247	51.0	211	49.8
	Doctor	44	9.1	47	11.1
	Midwife	20	4.1	24	5.7
	Accountant	14	2.9	15	3.5
	Clerk	9	1.9	7	1.7
	Pharmacist	6	1.2	9	2.1
	Dentist	3	0.6	4	0.9
	Allied medical professions	85	17.6	78	18.4
Education level	Diploma	56	11.6	29	6.8
	Bachelor	212	43.8	174	41.0
	Postgraduate	222	45.9	212	50.0
Work Experience: in the hospital	3 - < 6 years	50	10.3	38	9.0
	6 - < 11 years	261	53.9	117	27.6
	11 - < 16 years	112	23.1	147	34.7
	16 - < 21 years	61	12.6	91	21.5
	21 years or more	35	7.2	49	11.6
		15	3.1	20	4.7

4.2 Major QMS Obstacles in Jordanian Hospitals

The results of the descriptive statistics (Table 2) show the key obstacles in high- and low-performing hospitals. The table also shows the mean and standard deviation for the 23 items of the QMSOS. In high-performing hospitals, the major obstacles (with mean 3.5 or above) were lack of rewards for hospital staff ($M = 3.74$, $SD = 1.18$), inadequate authority delegation ($M = 3.73$, $SD = 1.20$) and lack of staff ($M = 3.53$, $SD = 1.20$). In low-performing hospitals there are six major obstacles which are: lack of rewards for hospital staff ($M = 4.01$, $SD = 1.03$), inadequate material resources ($M = 3.88$, $SD = 0.97$), lack of training programmes ($M = 3.85$, $SD = 1.09$), insufficient staff motivation ($M = 3.78$, $SD = 1.03$), insufficient budget for QMS ($M = 3.78$, $SD = 1.00$), and inadequate authority delegation ($M = 3.73$, $SD = 1.09$).

Table 2. Obstacles for high-performing and low-performing hospitals with means and standard deviations

Obstacles	high-performing hospitals			low-performing hospitals		
	Type of Obstacle	Mean	SD	Type of Obstacle	Mean	SD
Lack of rewards	MO	3.74	1.18	MO	4.01	1.03
Inadequate authority delegation.	MO	3.73	1.20	MO	3.73	1.09
Lack of training	MoO	2.65	1.17	MO	3.85	1.09
Lack of staff	MO	3.53	1.20	MoO	2.61	1.31
Insufficient staff motivation	MoO	2.71	1.29	MO	3.78	1.03
Inadequate material resources	MiO	2.41	1.13	MO	3.88	0.97
Inadequate communication	MoO	3.31	1.22	MoO	2.81	1.17
Insufficient budget for a QMS	MiO	2.45	1.08	MO	3.78	1.00
Resisting changes	MiO	2.46	1.13	MoO	3.26	1.20
Lack of teamwork encouragement	MoO	2.72	1.32	MoO	2.88	1.30
Frequent changing of the hospital manager	MiO	2.20	1.13	MoO	3.46	1.27
Improper human resources policy	MoO	2.65	1.16	MoO	2.89	1.17
Lack of quality training	MoO	2.64	1.23	MoO	2.90	1.28
Improper data utilisation	MoO	2.50	1.11	MoO	2.91	1.21
Lack of quality procedures support	MiO	2.18	1.10	MoO	3.26	1.42
Ineffective ways to measure quality	MiO	2.47	1.04	MoO	2.88	1.28
Focusing on short-term goals only	MoO	2.68	1.14	MoO	2.62	1.27
Inappropriate procedures	MiO	2.44	1.06	MoO	2.84	1.24
Inability to change the organisation's cultural perspective regarding quality	MiO	2.37	1.17	MoO	2.85	1.22
Lack of costs and benefits analysis	MiO	2.33	1.02	MoO	2.89	1.16
Improper quality and patient safety plan	MiO	2.27	1.12	MoO	2.91	1.22
Inaccurate database	MiO	2.28	1.06	MoO	2.70	1.30
Lack of patient focus	MiO	2.13	1.04	MiO	2.30	0.98

MO: Major Obstacles; MoO: Moderate Obstacles; MiO: Minor Obstacles.

The t-test analysis in Table 3 shows a significant difference in mean scores between the high-performing hospitals and the low-performing hospitals in favour of the low-performing hospitals.

Table 3. Hospital classification means, standard deviations, and *t*-tests on the QMS obstacles scale in combined high- and low-performing hospitals

Hospital classification	N	Mean	SD	Mean Difference	T-test	Sig.
The high performing hospitals (two private and one public)	484	2.65	0.50	-0.49	-17.08	0.00
The low performing hospitals (two public and one private)	424	3.13	0.35			

* The difference in mean is significant at the 0.05 level.

4.3 The Effect of the Health Sector Variable and Demographic Characteristics on the Participants' Perception of Obstacles in QMSs

For public /private sector variable, the t-test for sector scores on QMSOS shows that there is no significant difference ($p = 0.07$) in the means scores between private sector ($M = 2.84$, $SD = 0.49$) and public sector ($M = 2.94$, $SD = 0.45$).

For demographic variables, the t-test shows that there is no significant difference between males and females in high-performing hospitals. The GLM Univariate Analysis Of Variance procedure shows no significant difference between profession groups, education levels and experience in the hospital level with referring to the QMS obstacles. However, the result showed a significant difference between age groups. According to the age group variable in high-performing hospitals, the Tukey HSD post hoc test (Multiple comparison) (Table 4) shows significant differences between 20-<30 age group ($M = 2.74$; $SD = 0.43$); 30-<40 age groups ($M = 2.75$; $SD = 0.46$); and 40-<50 age groups ($M = 2.64$; $SD = 0.50$) ($p = 0.00$; $p = 0.00$; $p = 0.02$ respectively) on one hand and 50 years or more age groups ($M = 2.39$; $SD = 0.56$) on the other hand in favour of the 20-<30; 30-<40; and 40-<50 age groups.

Table 4. Multiple comparison analysis based on age group in high-performing hospitals

Age (I)	Age (J)	Mean Difference (I-J)	Significance
20 - <30	30 - <40	-0.02	0.98
	40 - <50	0.09	0.37
	50 or more	0.35*	0.00
30 - <40	20 - <30	0.02	0.97
	40 - <50	0.11	0.25
	50 or more	0.37*	0.00
40 - <50	20 - <30	-0.09	0.37
	30 - <40	-0.11	0.25
	50 or more	0.26*	0.02
50 or more	20 - <30	-0.35*	0.00
	30 - <40	-0.37*	0.00
	40 - <50	-0.26*	0.02

* The difference in mean is significant at the 0.05 level.

In low-performing hospitals, the GLM Univariate Analysis Of Variance procedure shows no significant difference between age groups, profession groups, education levels and experience in the hospital level with referring to the QMS obstacles. However, the t-test (Table 5) shows that there was a significant difference ($p = 0.05$) in the mean scores between males ($M = 3.26$, $SD = 0.35$) and females ($M = 3.08$, $SD = 0.38$).

Table 5. Gender means, standard deviations, and t-tests on the QMS obstacles scale in low-performing hospitals

Gender	Count	Mean	Std. Deviation	T-value	Sig.
Male	151	3.16	0.35	2.00	0.05
Female	271	3.08	0.38		

* The difference in mean is significant at the 0.05 level.

5. Discussion

5.1 Major QMS Obstacles in High- and Low-Performing Hospitals

The study found that high- and low-performing hospitals have differences and similarities related to QMS obstacles. In high-performing hospitals, there are three major obstacles: lack of rewards for hospital staff, inadequate authority delegation, and lack of staff. On the other hand, the low-performing hospitals share six major obstacles. These are lack of rewards for hospital staff, inadequate material resources, lack of training programmes, insufficient staff motivation, insufficient budget for a QMS, and inadequate authority delegation. It is important to note that the two obstacles, lack of rewards for hospital staff and inadequate authority delegation,

are common to both high- and low-performing hospitals. However, the low-performing hospitals have higher mean QMSOS scores than the high-performing hospitals, indicating that participants in low-performing hospitals consider these obstacles to be more serious than those in high-performing hospitals.

These findings are similar to those of other studies in the United States (Messner, 1998), Switzerland (Hudelson et al., 2008), Thailand (Pongpirul et al., 2006), Iran (Rad, 2005), Indonesia (Amar & Zain, 2002), and Taiwan (Lin & Jang, 2008). These researchers found that some or all of these factors (lack of rewards for hospital staff, inadequate authority delegation, and lack of staff) were major obstacles.

These factors are mainly related to leadership and management of human and materials resources which constitute critical elements to quality systems, and would significantly support the realization of optimum results in hospitals if they were free from obstacles (Ajrlouni, Dawani, & Diab, 2015; Wanjau, Muiruri, & Ayodo, 2012; Dixon-Woods, McNicol, & Martin, 2012). The findings also show that staff of the participating hospitals recognizes these obstacles as serious enough to hinder their capacities to provide high quality service. The staff's opinions of the QMS obstacles in their respective hospitals reflect an insider understanding that the elimination of these obstacles would help the system and improve the quality of health care in Jordan.

The results of the study showed that lack of rewards for hospital staff is a major QMS obstacle in both high- and low-performing hospitals and should to be given considerable attention. Abualrub and Al-zarus (2008) recommended that nurses in Jordanian hospital need to be rewarded and recognized.

This study found that inadequate authority delegation is a major QMS obstacle in both high- and low-performing hospitals. This finding mirrors the conclusion of El-Said and Becker (2001), who concluded that management in Jordan is largely traditional and manifested in specific attributes such as limited future orientation and excessive lack of delegation of authority. Studies of QMS in other countries (Desai, 2010; Hudelson et al., 2008) also found lack of authority delegation as an obstacle. For example, Desai (2010) found in India that one of the 22 barriers facing quality implementation was inadequate authority delegation. Similarly, found in the United States that lack of authority delegation negatively affected quality performance.

The results showed that lack of staff is considered a major QMS obstacle in only high-performing hospitals. This result is consistent with other studies conducted in different countries (Hudelson et al., 2008; Pongpirul et al., 2006; Rad, 2005). Inadequacy of staff was ranked as a major obstacle to QMS in hospitals based on health care professionals' views (Pongpirul et al., 2006). Shortage of staff mainly nurses is not uncommon in Jordan hospitals as Ajrlouni (2010) recommended that the Ministry of Health in Jordan needs to adopt new strategies and policies to deal with the nursing shortage.

Lack of training is only considered a major QMS obstacle in low-performing hospitals. This result is consistent with previous studies (Desai, 2010; Karaszewski, 2004; Rad, 2005), which found lack of training as a QMS obstacle in some hospitals. This finding indicates that perhaps low-performing hospitals in Jordan, which are mainly public hospitals are not providing enough in-service training programmes to their staff due to declining government spending on health (Jordanian Department of Statistics (JDOS), 2010; Jordanian High Health Council, 2012). Abdulla, Qdais, and Rabi (2008) found that training programs for doctors, nurses and technicians in Jordan were limited in most hospitals. Such limited opportunities for professional development do not bode well for a successful QMS.

Inadequate material resources and an insufficient budget for QMS are major QMS obstacles in low-performing hospitals. Other studies (Pongpirul et al., 2006; Rad, 2005) have found similar results. This finding in relation to low-performing hospitals in Jordan supports the fact that public hospitals suffer from limited resources due to declining government funding (Jordanian Department of Statistics (JDOS), 2010; Jordanian High Health Council, 2012). In two separate Jordanian studies Al-Hawajreh (2011) and Mrayyan (2007) found that lack of resources (including finance, equipment and material to perform tasks) were major issues for all sectors in Jordan. Therefore, these hospitals require additional resources either from government or through other internal revenue generation sources. In addition, adopting efficient resource management could help hospitals improve upon the existing budgetary constraints.

The result showed that insufficient staff motivation is a major QMS obstacle in only low-performing hospitals. This result is consistent with other studies (Desai, 2007; Dixon-Woods et al., 2007; Franco, Bennett, Kanfer and Stubblebine, 2004). Lin and Jang (2008) found that staff motivation leads to improved quality of services. They stated that creating a motivating environment in any organisation requires commitment from the organisation's managers who should focus on both extrinsically encouraging factors, such as good salaries and rewards, and intrinsically satisfying factors, such as job satisfaction and job security. Therefore, health workers in Jordan should be motivated to improve quality of patient care.

5.2 The Relationship between Demographic Data and QMS Obstacles

In low-performing hospitals, there was a significant difference between **males and females** in their perception of major QMS obstacles. Males referred to the major obstacles more frequently than females. This finding may be due to cultural issues. In Jordanian culture males assume more public and overt roles than females. Further, many more men are in middle management roles and see the issues that need to be addressed by top managers who are also often males. In other words a staff member who has responsibility and power in his/her job, is more likely to feel more committed to making sure that the system works in an efficient manner. This might explain why males reported more obstacles than females.

The study results showed that there were no significant differences among **age groups** regarding their rating of the QMS obstacles in low-performing hospitals. However, in high-performing hospitals, there was a significant difference among age groups. Participants in the groups 20–<30, 30–<40 and 40–<50 years old had higher mean scores on the QMSOS than those in the age group 50 years old or more. It appears that most of the older employees (50 years or more), who are managers or heads of departments do not consider some QMS items as serious obstacles. On the other hand, most of the younger staff members who do not have senior positions perceive many issues as major obstacles. One possible explanation for this difference is that managers and heads of departments in the workplace can cover a realm of duties, most of which are supervisory in nature, and give instructions to their staffs. The front line professionals, however, have to act in a professional manner, obey instructions, avoid conflicts of interest, and put the interests of clients ahead of their own interests .

6. Conclusion and Recommendations

The study has explored the major QMS obstacles that face high- and low-performing hospitals in Jordan based on responses from the hospitals' staff members. In high-performing hospitals, the major obstacles are three: lack of rewards for hospital staff, inadequate authority delegation, and lack of staff. The low-performing hospitals have six major obstacles: lack of rewards for hospital staff, inadequate material resources, lack of training programmes, insufficient staff motivation, insufficient budget for QMSs, and inadequate authority delegation. Their elimination or reduction will support and improve QMS in Jordanian hospitals. If these obstacles are not addressed urgently, they could hinder the QMSs in hospitals and negatively impact quality of services and cause serious problems.

It is evident that adopting a strategy or interventions to overcome QMS obstacles should be a priority for hospital management in Jordanian hospitals. The following interventions are recommended for this purpose:

1. Hospitals should reward talented and disciplined employees through good salaries and other benefits to motivate staff and minimize turnover rate.
2. Hospitals should recruit highly trained specialists in hospital management and /or train existing managers in hospital management.
3. Hospital managers should delegate part of their authority to their staff.
4. Hospital managers should build and maintain a trusting environment in their hospitals.
5. Hospitals should give priority for the provision of adequate resources (financial, material and manpower) to implement efficient QMS.

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