Factors affecting the quality of care in cardiac outpatient departments: Patients' perspective

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Abstract

Purpose: The study aim at exploring cardiac patients‟ perception of the factors affecting the quality of cardiac services delivered in Out Patient Department (OPD) in Jordanian hospitals.

Methods: Semi-structured face to face interviews were conducted with 17 cardiac patients during their clinical appointment in two cardiac care centers in Amman, Jordan. A framework approach was used to analyze the qualitative data.

Results: Participants identified several factors which could affect the quality of cardiac services provided in OPD: lacks of time for physicians to spend with their patients, inhibited physician-patient relationship which in turn limits the time available for physician care delivered to each patient; patients information was not adequately provided; organizational factors such as long waiting time and the intervals between the patient‟s visits.

Conclusion: Several factors were identified by cardiac patients that may influence the quality of cardiac services provided by OPD. Healthcare professionals and decision maker should consider patients‟ views to improve the quality of cardiac care in OPD.

Introduction

Although outcomes for patients living with heart disease are improving, Jordan, like most countries around the world, is experiencing a major increase in the prevalence of acute coronary syndrome. This in turn has both high human and economic costs. Cardiovascular diseases continue to be a top health issue for Jordanians, and are considered as one of the primary causes of death accounting for 35.92% and 15% of total deaths in Jordan in the year 2009 (Jordanian Ministry of Health 2009). Although, healthcare system at different levels in Jordan is focused more than ever on improving the quality of cardiac patient care, the quality and opportunity for improvement in the cardiac out patient department (OPD) are largely unknown. Therefore, measuring and improving care in OPD has become increasingly important (Chan, Oetgen, & Spertus 2010).

The OPD is a basic organizational unit of the hospital, which aim to carry out health promotion and preventive activities, and to serve as the „front door" of the hospital system for referring and admitting patients with more complex needs for appropriate intervention. Evaluating the quality of the services provided by OPDs is important as the performance at this level affects the whole health system. This evaluation is part of assessing the quality of health services as a strategy that includes meeting the basic standards (eg., performance, infrastructure, service delivery, and operational process) and consumer consultation where they are heard, listened to and involved in actual decision making (Hoodless, Bourke, & Evans 2008). Therefore, to build image and maintain competitive advantage, the successful organizations recognize the significance of delivering quality services continuously (Chahal & Kumari, 2012).

The present study is part of those efforts aim at improving the quality and performance services in healthcare sector through comprehensively analyzing the factors that affect the quality of cardiac care in OPD in Jordan. Moreover, it will provide healthcare providers about the development of health care quality and performance and the factors that affect this quality. To improve the quality of care, information is needed regarding the factors that affecting care and the obstacles faced in improving care. Therefore, the overall aim of this study is to gain a rich and detailed understanding of the factors affecting the quality of cardiac care in OPD. Consequently, this will help healthcare administrators in improving quality services in the healthcare sector.

Review of literature

One of the most important topics in the health service is quality of health care. Chahal and Kumari (2012) argued that improving and even maintaining the quality of care is a critical dilemma that healthcare administrators face. The key components of health service quality are "effectiveness, efficiency, accessibility, scientific and technical development and the match between the availability of services and needs of the population" (Marin, Silberman, & Sanguinetti, 2009, P. 284). Also, Wakerman et al. (2008) suggested that the essential service requirement to enhance quality of care is generally measured from a provider perspective in terms of principles, such as good governance, management and leadership, funding and infrastructure, and a sustainable workforce. Factors, such as "better quality, less waiting time, service guarantees, good physical environment, and better interaction are contributing factors to positive patient perceptions" (Chahal & Kumari, 2012, P. 189), which in turn result in patient satisfaction, patient loyalty, and hospital profitability.

In order to maintain and increase patients satisfaction, it is important to measure and evaluates the quality of the health care provided to them (Johansson, Oleni, & Fridlund, 2002). A study by Connell et al (2010) reported the perceptions of both clients and their carers about receiving palliative care services, and the impact of the services on their quality of life. Both clients and carers identified that long waiting time is a major theme affecting their ability to receive treatment, which was frustrating and seen as a waste of valuable time. Interestingly, clients and carers expressed the need for information that is essential to enhance their understanding about the care received and symptoms management. Clients wanted information to be presented in a way that was easy to understand, and the consistency was crucial to both clients and carers.

According to Rashmi and Vijaykumar (2010) hospitals are considered as a buyers‟ market, where the patient is all important. In order to achieve patient satisfaction, the hospitals have to develop their technology and become more service oriented. They also stated that patients are in support of quality of care. Also, it is clear that being able to understand factors affecting the quality of cardiac patents care will provide information to support improvements in the quality of care delivered to cardiac patient in OPD. Therefore, information is needed regarding variables that influence care and the obstacles faced in improving care.

Factors which influence the quality of nursing care in rural district hospitals in South Africa were studied by Eygelaar and Stellenberg (2012). Although the study focused on the quality of nursing care, the findings of the study revealed that the availability of doctors played an important role in providing the patients with the safety and prevent putting them at risk. The study found that 76% of the participants

indicated that inadequate availability of doctors create an ethical and legal dilemma and placed the patient‟s safety at risk. This is supported by Albert et al (2005) who found older patients to report receiving poor quality of care. However, the study relied on recording the care to measure the quality of care provided rather than the care delivered. Irurita (1999) further found that poor doctor-nurse-patient communication had a deleterious effect on the patient‟s care provided.

A qualitative study by Al-Azri et al (2011) involved the interview of 11 diabetic patients in the primary care setting aimed to explore the factors affecting the quality of care. The findings of this study identified several factors that could affect the quality of care. For instance, patients emphasized that continuity of care is associated with better outcomes and improved the quality of care among patients. Patients also emphasized that long appointment waiting time limits the opportunity for the early detection, evaluation and management of a new patient‟s problem. Moreover, the patients highlighted the importance of patient education about lifestyle changes as a good factor of controlling the patient‟s problem. The findings in this study are consistent with those of Johansson, Oleni, and Fridlund, (2002), in that the patients who had received clear and straightforward information increased their understanding about care provided and therefore become more satisfied. Similarly, Irurita (1999) pointed that the level of quality of care was found to depend on the information given to the patients which facilitate their understanding of the hospital routine and prepared them to deal with some of the aspects of being a patient. Therefore, reducing their uncertainty and consequently reduce their stress.

Marin et al (2009) surveyed 20% of primary care health centers (PCHCs) in Argentina to investigate the structure, process, and results of care. The authors found

that PCHCs provided only basic services to people who seek attention. Due to the low of health-seeking behavior, only 13% of the populations who needed care accessed services. The survey further found that heath team members showed a lack of clear objectives around what was expected of them and the role of PCHCs in the healthcare system. This affected their ability to respond to population demands due to the lack of resources and fear of changing a model that has been used for both patients and health team members. This is supported by Johansson and Fridlund (2002) who stated that physical environment has an impact on the patient‟s physical and mental health, and hence affect their satisfaction. Irurita (1999) also noted that the quality of care was affected by the services provided by the hospital. The author further found that patients received high quality care in private and smaller hospitals than in large and public hospitals.

To improve quality of care in cardiac OPD in Jordan, information is needed about the factors that influence care and the obstacles faced in improving care. To our knowledge, no such study has been undertaken in cardiac OPD in Jordan. This study therefore aims to develop a baseline to measure the factors affecting the quality of cardiac care aimed at improving cardiac OPD care. The purpose of the study was to evaluate the quality of care provided by OPD in Jordan and to explore factors affecting the quality of care provided.

Methodology

Design

A qualitative research approach was used to collect data from patients. A qualitative methodology is proposed as the most appropriate to use in seeking to

understand the phenomenon of this study as it focuses on the human experience in naturalistic settings (LoBiondo-Wood & Haber, 2002).

Sample

The participants were selected using convenience sampling method. The sample of this study was patients who attended an appointment in the cardiac OPD. Prospective participants were verbally invited followed by outlining the proposed study and they were encouraged to ask questions and seek clarification if required. During the meeting, patients were invited to participate in the study and asked to sign a consent form if they wish to participate. The selection of the participants was guided by a set of inclusion criteria including: (1) older than 18 years, (2) being a cardiac patient; (3) a current OPD patient for at least one year, (4) willing to participate, and (5) have no cognitive impairment. The selection of participants who had at least one year of experience with OPD was because they are able to reflect and share their experience with others. Based on the literature (Al-Azri et al, 2011, Irurita, 1999), the number of potential participants in the three coronary OPD was (15-20), however this was depend on data saturation.

Setting

The proposed study was conducted in the cardiac OPD in Jordan. Jordan has four types of health services; these are: governmental, military, private and university training hospitals. Only three cardiac centers (one military, one university, and one governmental) were included in this study.

Data collection

The data collection process involved interviewing participants during their appointment attendance. Interviews were performed by the primary researcher in

Arabic language, and recorded using an audio tape recorder. However, at the end of the study the entire interview tapes will be destroyed and transcripts will be shredded.

The interviewer started the interviews by asking patients to complete a demographic data and initiated a short conversation on a general topic. Then, open-ended questions were asked to prompt the patients to tell their narrative. The starting question used was: "Could you please explain your experiences of the different aspects of cardiac care services provided in the cardiac clinic in your hospital". The interviews were conducted in the charge nurse"s office after obtaining their permission. Each interview lasted between 20-30 minutes. The interview focused on the following aspects of services. These were agreed upon by the investigators after a thorough review of relative literature (Al-Azri et al, 2011):

1. the effectiveness of appointment system,
2. suitability of waiting area,
3. waiting time before consulting the doctor,
4. the role of nurses, doctors and nutritionists,
5. the efficiency of laboratory test and pharmacy procedures, and
6. the availability of cardiac health education

The researchers also asked for clarifications and prompted the patients frequently during the interview, until they had no more to tell.

Data analysis

Polit and Beck (2004) stated that the data analysis process in qualitative research aims to describe shared practice and common meanings. Each tape recorded conversation was transcribed verbatim by the main researcher. Data obtained from the transcribed interviews were analyzed by the researcher using thematic analysis.

According to Braun and Clarke (2006), thematic analysis referred to "a method for identifying, analyzing and reporting patterns (themes) within data" (p.79).

Ethical approval

Approval of the study was obtained from the Scientific and Ethical Research Committee at the Faculty of Nursing, the University of Jordan. Following their approval, permission was gained at the selected hospitals before data collection begins. All prospective participants were invited verbally to discuss their concerns and all questions were answered concerning the use of data, confidentiality, and timing of interview. All participants were invited to voluntarily participate and were informed that they could withdraw at any stage without a need to provide a reason and any effect on their care. Confidentiality was maintained throughout the study. All patients were provided with an information sheet outlining the study and asked to sign a consent form. Only the primary researcher will be conducting and transcribing the interviews. All study transcripts and demographic data were identified by code numbers. All of these documents will be saved in the researcher"s password-protected computer, and hard copies will be stored in a locked drawer with access restricted to the primary researcher. At the end of transcription review, the interview tapes will be destroyed and transcripts will be shredded.

The findings

Seventeen cardiac patients, 12 males and 5 females, were interviewed during their appointments. Their age ranged from 33 to 80 years with an average of 56 years. Eight patients were educated up to secondary level and the remaining had graduate and post-graduate education. Three main themes emerged from the data analysis regarding the factors affecting the quality care from the patients" perspective. These include: (1) physician–patient relationship and sufficient time, (2) patient information, and (3) organizational factors**.**

Physician–patient relationship and sufficient time

One of the most important findings to emerge from the study is related to the fact that the quality of patient‟s cardiac care could be affected by lack of time for physicians to spend with patients. The inhibited physician-patient relationship limits the time available for physician care delivered to each patient. The main reason for this lack of time was due to inadequate staffing. This may negatively impact the quality of cardiac patients care.

An effective physician–patient relationship was considered to be central to quality of patient‟s care.

> *...They (physicians) did not give us enough time when we were in his office (patient 6).*

Another patient commented that

> *...The physicians always asks us, however he does not want to be asked (patient 2)*

Justifications were given for the physicians not talking to patients and for patients not engaging the physicians in conversation (and so facilitating the development of a good physician–patient relationship). The most common reasons put forth by the patient as inhibiting the quality of care was hospitals being short in staff. This perceived lack of time had negatively impacted on physician care generally.

> *...you just had to wait.*
> *...I saw 100 patients in the clinic and there were just 5 or 6 physician (patient 2).*

They also expressed their concern regarding the long waiting time to see the physician.

> *...I came to the clinic at 8 am as I was told but, I waited for four hours until they called me in (patient 2).*

The patients suggested that if there were more physicians employed there would be more time to develop effective physician–patient relationships:

> *...You know, they have to add more physicians to the office (patient 9)*

It was important that the physicians had enough time to sit down and talk to patients, especially when they (patients) were worried or afraid. Nevertheless, it was perceived that the lack of time prevents physicians from doing so.

Patient information

The possession of information, knowing what to expect and understanding the disease process and related procedures, was found to facilitate the retention of control by patients, thus reducing their vulnerability to emotional hurt. Being prepared enabled the participants to deal with some of the aspects of being a patient; it reduced uncertainty and hence the stress engendered by „not knowing".

> *...There was no health education provided (patient 10)*
> *...No advices were given to me (patient 14)*

Other patient stated

> *… As an old patient, I feel tired and bored (patient 13).*

Whereas there was overwhelming consensus among the participants regarding the importance of being well informed about their condition, there was a general agreement that they had been inadequately informed. These aspects were reflected throughout these data. The importance of adequate disease information was emphasized in the following way:

One participant elaborated on his clinic experience:

> *...No enough information was given. There were a lot of things they could tell you beforehand. I had no idea what some of my medications given to....., I think the most important thing is knowledge about your medications which they missed (patient 13)*

The same participant further stated:

> *...Sometimes, the doctor gave me a pills for depression, when I asked the doctor about it, he told me this is what being written here (patient 13)*

Examples of lack of information included:

> *...I was told nothing at all . . . I was told to loose weight, but was not told how to do that (patient 2).*

> *...They (physicians) never gave any information unless someone asked for (patient 7)*

Some of the participants suggested that the hospital can benefit from the television provided in the waiting area to present information that may help the patients understand their diseases and related procedures. One participant said:

> *...They (hospital) could use the TV in the waiting area to provide information about nutrition, smoking cessation, and also some lessons about exercise that may help cardiac patients (patient 14)*

Another participant suggested

> *...They can provide information through leaflets that include information about cardiac patients (patient 11)*

Information provided to the patients was considered crucial to understand their disease process and related procedures and that the physicians should provide it in a clear and understandable way.

Organizational factors

The study participants expressed their discomfort regarding the intervals between visits to the cardiac clinic. They felt that their regular visit should be every month or maximum every two months. Some of the participants stated that:

> *...The next available visit is available only after one year (patient 3),*
> *...The next appointment will be in the next 6 months or more (patient 6)*

Other participants commented that the waiting area is very small compared to the number of patients.

> *...The waiting area is very small and there is no enough seats for all patients (patient 6).*

The same patient verbalized that some patients came to the clinic without an appointment and had seen by the physician that lead to increasing in the waiting time to see the physician. Therefore, some patients suggested that hospital administrators should add up more help to the consultant to enhance the quality of medical care and speed up the service. Other participants were unhappy of delaying their laboratory test results. Indeed, some others were sent to other healthcare institutions.

> *...In reference to the lab, do not even ask. It is hectic, takes for ever, hours and hours of waiting and sometimes specimens were sent to different centers.*

Whereas there was a consensus among the participants regarding the long waiting time on line in front of the pharmacy to have their medications, some of them (old patients) highlighted the importance of being well informed about his medications. The importance of adequate information was emphasized by one of the patients who stated that

> *...They (pharmacists) just handle us the pills bags without any instructions. However, I am an illiterate, so difficult for me to figure them out (patient 13).*

Discussion

The present study examined the factors affecting the quality of cardiac care in the OPD in Jordan. The interpretations authors made of the collected data based on the transcribed

interviews. It was evident that several factors affected the quality of care for patients attending their appointments in the cardiac OPD.

The findings of this study indicated that the physicians dealt with the patients in a short time manner and they attempted to control their disease with the treatment option written to the patient‟s file previously. This raised the question that physicians‟ treatment was considered to focus on the physiological aspect rather than the whole patient‟s situation. Therefore, physicians need to value the importance of providing both physiological and psychological treatment when dealing with patient‟s cardiac problems. To care for a patient suffering from cardiac problems is a serious challenge for physicians. Such a care requires the physicians in the OPD to assess and interpret accurately all evidence available to confirm the patient‟s health situation. This will only occur with providing enough time for the patients. Patients in this study stressed that providing enough time by health team members, taking their history and assessing their health problem, making a diagnosis and provide treatment are essential parts of caring process in the cardiac OPD. This could prevent or decrease the level of adverse effects such as anxiety and fear. The findings of this study were consistent with that of Eygelaar and Stellenberg (2012) study, who found the unavailability of doctors as a crucial to provide safe patient care and prevent complications. Furthermore, Irurita (1999) stated that being short of staff was found to inhibit the quality of care.

The physical environment of the cardiac OPD plays an important environmental factor that was given as inhibiting quality of care. Appropriate clinical care can help assess and manage cardiac patients without any delay. Thus, the concern about the quality of care encompasses both clinical care services and the aspect of physical environment. Previous study by Johansson and Fridlund (2002) suggested that patient‟s satisfaction was affected by physical environment in the hospital. This finding is consistent with the work of Irurita (1999) who stated that the quality of

care was affected by the services provided by the hospital, and that public hospital provided a poor quality of care.

Participants‟ emphasized that the quality of their cardiac care could be affected by long waiting times either to see the physicians or for getting their next appointment at the cardiac clinic. Long appointment waiting times limit the opportunity for the early detection, evaluation and management of new cardiac problems, which may lead to poor quality of life. It would appear that patients were aware of the performance of the physicians and that they wanted to be reviewed to receive the appropriate treatment in a timely manner. The availability of more physicians to manage patients with cardiac problems on a regular basis was found to improve the process of cardiac care. The findings of this study are similar to that reported by Connell et al (2010) who found that patients were unsatisfied with long waiting times during their appointment and considered it as a waste of their time. This study also found that the probability of a factor affecting the quality of cardiac care was significantly associated with the clinic services rather than its direct measures of clinical care. The impact of these services was such that a decrease numbers of a comfortable chairs and small waiting area were associated with low patients satisfaction with the care provided.

Participants also highlighted the importance of utilizing the waiting room for education about cardiac and lifestyle modifications. Using television on the waiting room for educational purposes has been shown to be effective for patient education. Patient education has been found to be an important factor in patient adherence to therapy (Al-Azri et al., 2011, Connell et al 2010, Johansson & Fridlund 2002). Providing leaflet for cardiac patients has also been shown to be effective in improving patients‟ knowledge about cardiac disease. Hospitals should provide patients with the best information available and supporting them in order to develop the capacity to understand broader heath and wellbeing issues. Previous studies by Connell et al (2010),

Rashmi and Vijaykumar (2010), Johansson and Fridlund (2002), and Irurita (1999) considered information as an important aspect of both quality of care and patient‟s satisfaction. They stated that information was crucial to assist patients understand their disease process and related procedures. They emphasized that health care providers have to provide health information in a clear and understanding manner. Therefore reduce patient‟s vulnerability to emotional stressors.

Conclusion

The current study aimed to explore cardiac patients‟ perceptions regarding the quality of healthcare services in OPD in Jordan. The findings of this study demonstrated a number of factors that appear to be affecting the quality of care of patients with cardiac diseases. Several recommendations emerged from this study relevant for practice and policy of OPD in order to improve the quality of cardiac care. An effective physician-patient relationship was considered to be central to the quality of care. Waiting area could be used to educate patients about their disease process and related procedures. Therefore, providing patients with health materials by leaflets or T.V might help increasing patients‟ awareness and improve outcomes.

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