

PATIENT SATISFACTION EVALUATION ON HOSPITALS; COMPARISON STUDY BETWEEN ACCREDITED AND NON ACCREDITED HOSPITALS IN JORDAN

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Abstract

The research aim is to compare accredited and non-accredited hospitals in relation to patient's satisfaction in Jordan and to address the question if there is a correlation between patient's satisfaction and accreditation. The researchers adopt a quantitative methodology. T test was used to test the main hypotheses. Patient satisfaction was measured using the SERVQUAL scale (tangibility, reliability, responsiveness, assurance and empathy). 1000 questionnaires were distributed to stratified random sample of hospitals' inpatients. The results show considerable evidence that accreditation significantly improves patients' satisfaction. Accordingly, accreditation programs should be reinforced as a tool to improve health service quality.

Keywords: Accreditation, Service Quality, Patient Satisfaction, SERVQUAL

Introduction

Healthcare Market build up on patient's intentional behavior in future, satisfied patients are willing to return and to recommend the hospital to their families and friends, esteeming the significant importance of patient satisfaction on the financial position of the healthcare institutions (Aliman and Mohamad, 2013). Recently, health care manager in developing countries realized how patient perception of quality derives their choices among hospitals. Zineldin (2006) explained several reasons for improving quality in health care services in developed countries; starting with recording high level of patient satisfaction associated with high costs, understanding

quality methods helps managers to solve problems, enhance relations between health providers and to identify methods in helping reducing waste and saving.

In Jordan the medical tourism increased recently, it was recognized by the International Medical Tourism Journal (IMTJ) to be Destination of the Year 2014, which was explained according to the high reliance on human capital. The Kingdom boasts a physician density of 25.5 physicians per 10,000 capita, higher than the average level in the region. It also has high densities of nurses and pharmacists, quite similar to global leaders in the field (Jordinvest, 2012). Also, there are no language difficulties or obstacles since most hospitals staff learned in English. However, increasing pressure to achieve visible position in the medical field united the way of competition in order to have valid trustful service from the patient perspective. Based on literature, managers should incorporate customer satisfaction and perceived service quality in exit strategies which in its turn will increase loyalty among the current clients (Amin and Nasharuddin, 2013). Therefore, Public and private hospitals in Jordan are concentrating their efforts on achieving accreditation which is recognition that the healthcare institution has accomplished the determined list of standards for quality and safety of their health services. The Jordan Healthcare Accreditation Project (JHAP) was launched in 2007 which is a technical assistance program to support healthcare accreditation. JHAP was managed by University Research Co., LL C (URC) in collaboration with Joint Commission International and Abt Associates, Inc. The project was funded by the United States Agency for International Development (USAID), the ultimate objective is to improve the quality of health care services and patient satisfaction. The key results of the project include an organizationally and financially sustainable accrediting agency in Jordan. Health Care Accreditation Counsel (HCAC) supported from the Ministry of Health (MOH), the Royal Medical Services (RMS), the university hospitals, and the Royal Court for accreditation. Based on research review, to date insufficient data are available in order to reveal the implication of accreditation program on the key outcome of healthcare institutions as patient satisfaction. Shedding the light on the importance of patient satisfaction surveys from an ethical perspective, where, empowering patients and prompting their autonomy are essential features in healthcare delivery (Grol, 2001). On conclusion, this study employs SERVQUAL instruments in order to investigate the effect of accreditation program on patient satisfaction between hospitals with or without formal accreditation.

Literature review

Sharma (2013) declare an alarm for the hospital industry that the customer's perception regarding services is not as per their expectations.

Patients are continuously enriching their information regarding their health status. Where, global internet connections increasingly widen the realm of patient medical knowledge. Therefore, hospital administrators should consider quality strategy based on patient satisfaction on their future policy making.

Patient satisfaction

Oliver (1981) explained satisfaction as an emotional expression concerning a direct service encounter. While, Linder-Pelz (1982) presented that patient satisfaction created from the combination of patient's personal beliefs and their expectations regarding the hospital. Moreover, Patients' satisfaction is evolved from effective responses to patient's needs, and ongoing improvement of the healthcare services, along with in-depth relation between doctors and patients (Zineldin, 2006). On the other hand, Amin and Nasharuddin (2013) concluded five dimensions play an important role in shaping patient satisfaction; admission, medical service, all-inclusive service, discharge and social burden. Also, Peprah (2014) suggested other critical factors affecting as; the attitudes of nurses toward patients, effectiveness in delivering service, and the ability to communicate what patients need to know as well as the availability of up-to-date technology.

The Relation between Patient Satisfaction and Service Quality

Service quality is meeting or exceeding customers' expectation (Zeithaml, 1988). Perceived quality of an identified service would be the outcome of an evaluation process, where the consumer compares his expectations with the service he or she perceives (Gronroos, 1984). Patient satisfaction and health service quality both should be considered together for the balance and stability of a health care organization in a competitive environment (Anirban, 2011). In fact, the initial expectations patients have about care and front line services provider considered as a major determinant of satisfaction. If the provided care and services fall short of their expectations, the expected outcome is dissatisfaction. On the other hand, if provided care and services meet or exceed expectations, the result is expected to be an improvement in the level of satisfaction (Ross et al., 1987). Additionally, satisfaction was suggested as an essential factor for maintaining long-term relationships, which significantly revealed on the intention to return and willingness to recommend (Elleuch, 2008). Thus, patient satisfaction is mainly employed as a measure of health care institutional effectiveness (Abd-Manaf et al., 2012). Also, Tam (2007) confirmed that patient satisfaction is the most important key performance indicators in the health care revolution. So it should be incorporated into planning and monitored regularly. Additionally, patient satisfaction, stands

as most crucial point in planning and implementing and evaluating of health service. Where, achieving high quality could be by meeting patient needs and standardizing health care (Badri et al., 2008). Furthermore, Komashie et al (2007) identified that the basic principle for achieving high level quality is pressing need to gain customer satisfaction and the principle considered a pre requisite for long survival in a competitive environment. The authors mentioned that the experts in the quality field as Deming, Juran, Crosby and Feigenbaum have declared that emphasizing on quality is more beneficial than emphasizing on profit. Based on the literature review; patient satisfaction is influenced by process characteristics and so satisfied patients are expected to return to the same provider and recommend it to their families and friends. Moreover, patient preferences should pilot all possible aspect of health service delivery, from waiting hours to counseling techniques to decision-making.

Accreditation and patient satisfaction

Accreditation is an internationally recognized evaluation process used to assess and improve the quality, efficiency, and effectiveness of health care organizations. Accreditation program is voluntary in which certified assessors identify the gaps in performance of healthcare institutions with pre-established performance standards. It is also a way to publically recognize that a health care organization has met national quality standards (Pomey et al., 2005). According to Shaw (2000) accreditation formally started in the United States in 1951 with the establishment of the Joint Commission on Accreditation of Healthcare Organizations (JCAHO). This program was transmitted to Canada and Australia in the 1960s and 1970s respectively, Europe started accreditation programs in the 1980s. Then accreditation programs spread all over the world in the 1990s. Many developing countries implemented accreditation programs as an evaluation instrument to certify quality of service and efficient use of resources (Greenfield and Braithwaite, 2008). Patient satisfaction is considered as a key outcome of accreditation processes. Where, satisfaction surveys explore patient's perception of quality with relation to structure, process and outcomes of care. Also, they are useful in forecasting intentional behavior in the future. Alkhenizan and Shaw in 2011 found in their research considerable evidence on the positive impact of the general accreditation programs on clinical outcomes and subspecialties of a wide spectrum of clinical conditions. They recommend implementation of accreditation programs as a tool to improve the quality of healthcare services. Moreover, Haj-Ali et al (2014) presented that patient satisfaction in accredited hospitals in Lebanon driven by the tangibility dimension which is the hospital's appearance, physical facilities and equipment. On the contrary, many studies concluded

that accreditation program has no implication on patient satisfaction. Where, Hayati et al (2010) used SERVQUAL questionnaire to compare inpatient satisfaction in medical surgical wards in Malaysia's hospitals. The results showed that there was no significant difference in patient satisfaction between accredited and non-accredited hospitals. This study revealed the reflective of educational level, monthly income, age and employment status on patient satisfaction. Another study conducted by Sack et al in 2011 based on data from 36,777 randomly selected inpatients from 73 different hospitals in US, found no association between hospitals' accreditation status and patient willing to recommend the hospital. Based on the review of literature there is a significant need to identify whether or not the implication of accreditation program affect patient satisfaction here in Jordan regarding the lack of valid information in order to help managers assessing their healthcare strategy.

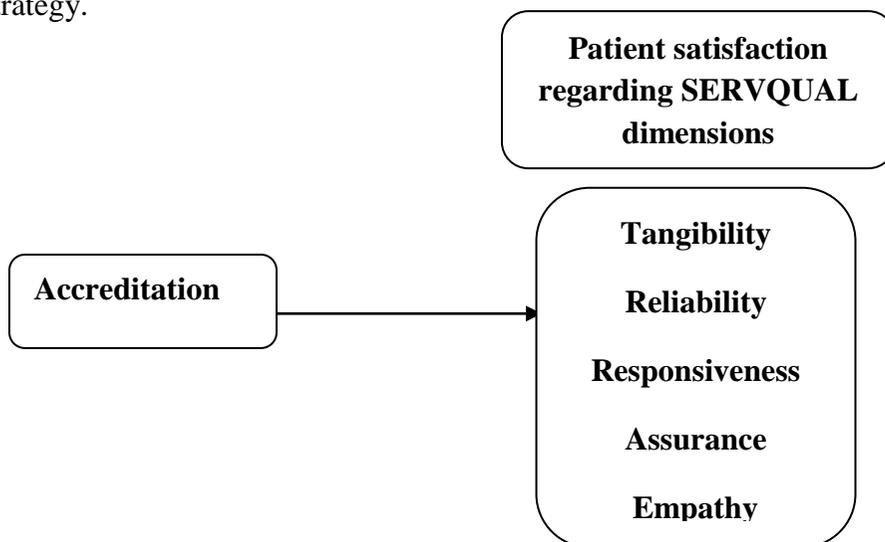


Figure (1)

Methodology

The purpose of this research is to examine the effect of accreditation program on patient satisfaction. Thus, the purpose of this study is based on hypotheses testing, which explains the relationships between variables Sekaran (2009.P 108).

H0; there is no statistically significant impact (0.05) of accreditation program on patient satisfaction.

In pursuit of this goal, descriptive cross-sectional research was conducted in duration of three months (April-June, 2015).

Population and sampling

Population; the study population consisted of inpatients in public and private hospitals that provide health services in Jordan. Ministry of Health operates 4965 bed in 31 hospitals, representing 37.8 percent of all hospital beds in the country; the military Royal Medical Services operates 2276 in 12 hospitals, providing 17.4 percent of all beds; and Jordan University Hospital accounts for 4.4 percent of total beds in the country, King Abdullah University Hospital accounts for 5.2 percent of total beds in the country. The private sector provides 35.2 percent of all hospital beds, distributed among 59 hospitals (MOH, 2014). To ensure generalizability, participating hospitals were randomly chosen after stratification based on size, accreditation classification and geographic location all over the kingdom.

Sample; a stratified random sample from the selected accredited and non-accredited hospitals in Jordan was collected during the second quarter of 2015. Inpatients were selected randomly from 74 hospitals in the three provinces in Jordan. By using the standard formula $no = \frac{z^2 p(1-p)}{e^2}$

$n = \frac{noN}{no + (N - 1)}$ (Berenson & Levine, 1992, p. 351). However, the

sample size was increased to 1000. Out of 1000 distributed questionnaires 788 completed questionnaires were collected, resulting in 78.8% percent return rate. The anonymity of all respondents was preserved.

Instrument design

In this study, the researchers employed SERVQUAL questionnaire developed by Parasuraman et al (1988) to measure patient's perception of services provided by the chosen hospitals. SERVQUAL constructed of 22 items representing five dimensions. A five point Likert-type scale, ranking from (1) for 'Strongly Disagree' to (5) for 'Strongly Agree' was used to measure the service quality scales. These dimensions were;

- 1- Tangibility: includes physical facilities, equipment, and appearance of employees of an organization
- 2- Reliability: manages the ability to accomplish the promised service precisely by an organization.
- 3- Responsiveness: The willingness to serve and support customers and deliver prompt service.
- 4- Assurance: explains how recognition and courtesy of front line employees and their competences influence trust and confidence.
- 5- Empathy: explains how much of an individualized care and attention an organization could provide to its customers.

The instrument was first translated into Arabic language, as the majority of Jordanian citizens are native speakers of Arabic. Then, the translated version was submitted to an instructor in English Department compared the original instrument with the translated Arabic version, for consistency. Both language versions include two sections as follows:

1. The first section: includes the demographic information like: age, sex and educational level.
2. The second section: is concerned about measuring the service quality, were patients determine the level of service quality in; 1- tangibility 2- reliability 3-responsiveness 4- assurance 5-empathy.

Reliability Test

A Cronbach Alpha test was used to ensure the instrument's reliability. The value was = 0.789 for the questionnaire. All values are accepted since they are more than 0.60 (Malhotra, 2004).

Table (1)

	Alpha
Tangible	0.781
Reliability	0.78
Responsiveness	0.712
Assurance	0.85
Empathy	0.822
Total	0.82

Statistical treatment Methods:

The “SPSS” statistical package system was used to analyze the collected data through the questionnaire. The following statistical methods were used:

- Frequencies and percentages
- Means and standard deviations
- T test for independent sample
- One way ANOVA

Analysis of the study results and hypothesis testing

1demographic profile

The demographic profile indicates that majority of inpatients were female with 59.1% of total sample. In addition to that approximately half of respondents have bachelor degree representing 42.2% of the total sample. Finally, the sample covered different age group, 30-35 years age group represents the highest present totaling 36.8%.

Means of sample’s responses toward service quality for inpatients in non-accredited and accredited hospitals

Figure (2)

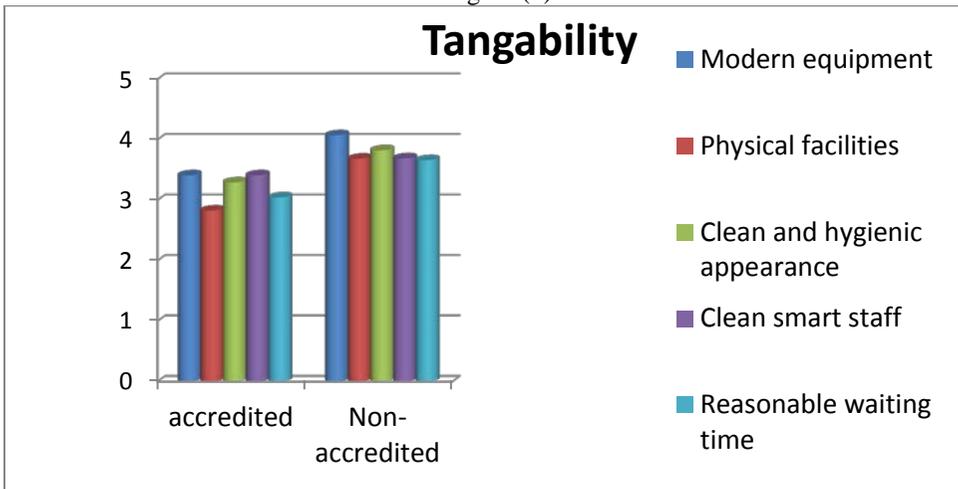
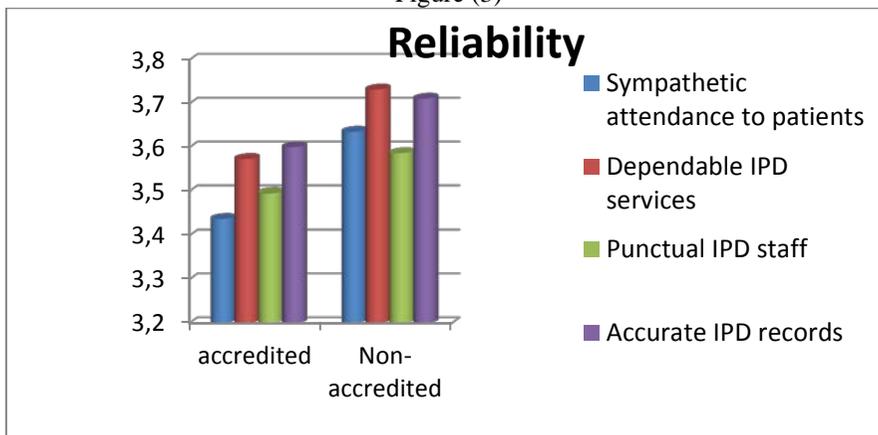


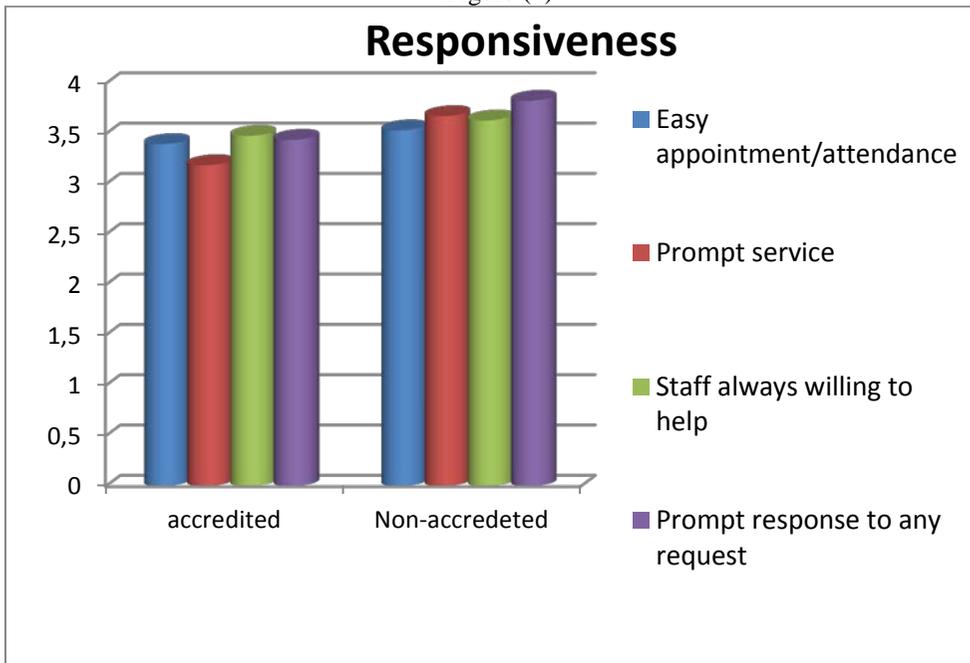
Figure (1) shows the differences in service quality level, tangible dimension, between accredited and non-accredited hospitals from patient's perspective. As it is illustrated in the preceding figure the mean for each item of tangible dimension reflects positive attitudes toward accredited hospitals' sample in comparison with non-accredited hospitals' sample. The highest loading in tangible dimension was given to the availability of modern equipment, where the mean of non-accredited hospitals was 3.4 while accredited hospitals was 4,06, the lowest loading was to physical facility which concern of water cycle, waiting rooms, etc. where the mean of non-accredited hospitals was 2.8 while accredited hospitals was 3.6. This means that the patient's biggest concern in non-accredited hospitals in comparison with accredited hospitals based on infrastructure issues.

Figure (3)



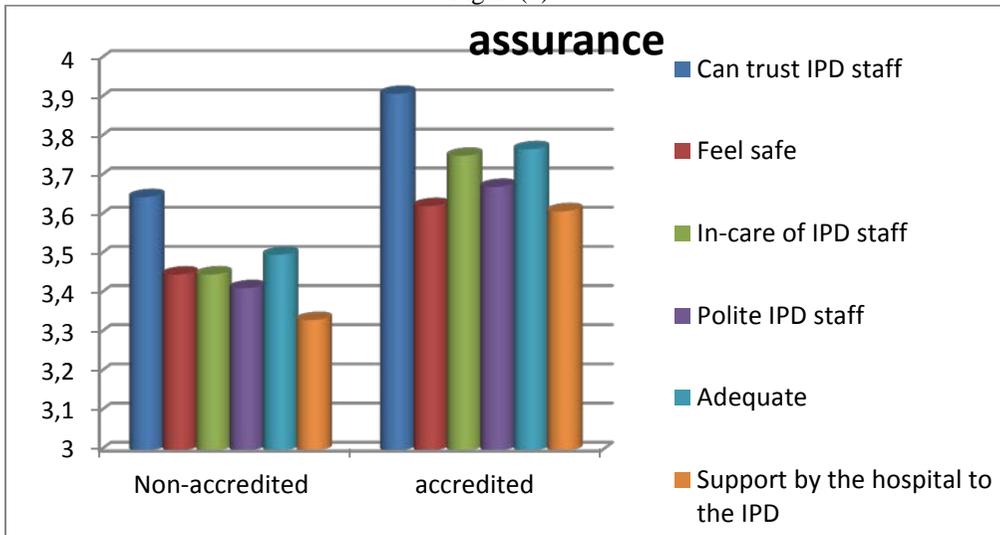
Reliability dimension vary from patient perspective as it is revealed in figure (2), accredited hospitals have a high scoring in each item of reliability, mostly in sympathetic attendance to patients. Where the mean of non-accredited hospitals 3.4 while accredited hospitals was 3.6. However, as it is illustrated in the preceding figure patients loading of each item go on parallel but the accredited take the grand mean, as the mean of reliability dimension in non-accredited hospital sample was 3.5 while accredited hospitals sample was 3.67. Which means that patient's concerns are similar but their perception of the level of quality vary according to hospital type.

Figure (4)



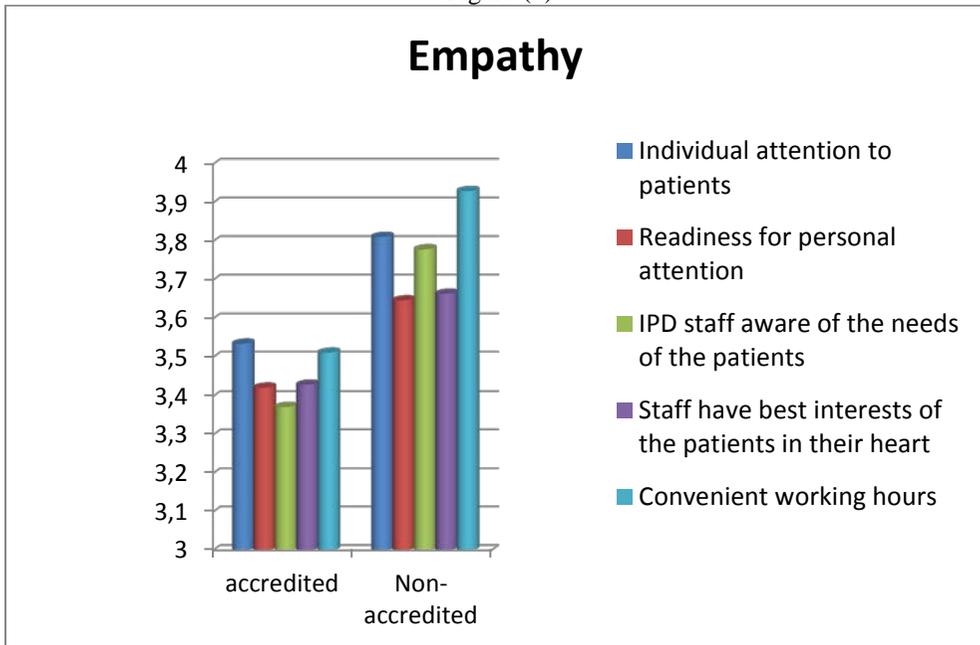
In responsiveness dimension a little better situation is presented at non- accredited hospitals. The illustration in figure (3) shows slight differences in patient's perception of quality of each item, mentioning that the prompt response to any request has high scoring in the accredited sample. Where the mean of non-accredited hospitals of prompt response was 3.19, accredited hospitals were 3.67.

Figure(5)



This dimension includes trusting staff, feeling safe, politeness of staff, in-care of staff and adequate support by the hospital to their staff, the analysis of responses gave the grand mean for assurance dimension of the service quality to accredited hospitals, exemplified in trusting staff, where the mean was 3.9 in accredited hospitals, while the mean was 3.6 in non-accredited hospitals. Moreover, as it is illustrated in figure (4) patients loading to the other four items consider low in non-accredited hospitals in comparison with the responses of the accredited hospitals sample.

Figure (6)



The fifth and last dimension is related to empathy, It has only one component with a very high loading 3.9 related to convenient working hours in accredited hospitals. As it is clearly presented in figure (5), in non-accredited hospital many of patients have low level of satisfaction related to empathy dimension when comparison with patient's perception in accredited hospitals, the situation in the non- accredited hospital is even worse when considering the IPD staff aware of the needs of the patients, where the mean was 3.3 in comparison which accredited hospitals where the mean was 3.7.

Hypotheses testing

H₀; there is no statistically significant (0.05) effect of accreditation program on patient satisfaction.

Table (2)
HYPOTHESES TESTING

	Type	N	Mean	Std. Deviation	T value**
Tangible	non - accredited	258	3.1946	.74738	-9.912
	Credited	530	3.7845	.85447	
Reliability	non - accredited	258	3.5271	.77957	-2.289
	Credited	530	3.6665	.84642	
Responsiveness	non - accredited	258	3.3779	.76182	-4.938
	Credited	530	3.6693	.80844	
Assurance	non - accredited	258	3.4658	.79409	-4.204
	Credited	530	3.7239	.83863	
Empathy	non - accredited	258	3.4543	.76956	-5.170
	Credited	530	3.7664	.80762	
Service quality	non - accredited	258	3.4025	.62056	-6.795
	Credited	530	3.7267	.64495	

** Significant at 0.01 level

T test for independent sample is used to test the above hypothesis. Table (4) indicates that means for credited hospitals are higher than non credited hospitals for each dimension which reflect high level of satisfaction. Also (t) calculated values are significant at (0.01) level for each dimension.

This means that the null is rejected, and the alternative is accepted, concluding that there is statistically significant (0.05) impact of accreditation program on patient satisfaction, and this impact tends to increase in accredited hospitals more than non-accredited hospitals.

Discussion, Conclusion and Implications

The objective of this research is to compare the effect of accreditation program on patient satisfaction between hospitals with or without formal accreditation. In other words, if there is an association between patient's satisfaction and accreditation. Accordingly, this research employed SERVQUAL instrument to achieve the main objective, mentioning that SERVQUAL allows for prioritization across the five dimensions by evaluating gap score of each dimension (Peprah and Atarah, 2014). The results of analysis regarding patients overall satisfaction regardless the

hospital type reflected positive attitude covering the five dimensions, since their means were above the mean of the scale (3). This implies that patients in Jordan receive acceptable level of service quality from their perspective.

It's worth mentioning that because of the differences in the financial and technological resources availability for each hospital, the research main goal is to reveal the shortcoming of health service quality issues in order to design strategies that improve quality of care.

The analysis results indicated that accredited hospitals have the preference based on patient's perception. The order according to the grand mean of each dimension was as follows: tangible dimension, empathy dimension, responsiveness dimension, assurance dimension and finally reliability dimension. the biggest problem in non-accredited hospital according to its patients perception in tangible dimension is physical facility as water cycle, waiting rooms , drinking water, these issues concern with infrastructure defects and poor hospitals design ,which may resulted from financial shorten. Additionally, the cleanliness of hospital was a concern to their patients which implies managerial issues. On the other hand, the results clear the differences in the mean of physical facility with preference to accredited hospitals. Moreover, patients were mostly satisfied with availability of modern equipment. Accordingly, the results presents that the way to improve patients' satisfaction related to tangible dimension in non-accredited hospital is to implement the changes in infrastructure and to improve management skill. Going to empathy dimension here patients found the staff of accredited hospitals more aware of their needs which may resulted from the lack of resources and heavy work load that may lead to shortening in the awareness of patients need. Accreditation based on clear polices to uniform and to cover all procedures the patients need leading to better perception of care and awareness. As Tam (2007) found that longer consultations enable opportunities for effective communication. Thus, the provider could find out more about a patient's health history and impart empathy concerning health problem, answer questions and provide professional health advice, this would help patient feel that the provider is concerned about their health problem. Therefore, longer consultations lead to better medical care and higher patient satisfaction. Moreover, the results significantly presents the preference of accredited hospitals in providing convenient working hour which implies the submitted effort to influence patient satisfaction in comparison with the non- accredited hospitals. In responsiveness dimension, patients most concern was of prompt services where the mean was 3.1 in non- accredited hospitals while the mean was 3.7 in accredited hospitals. The causes may refer to the financial position and the heavy work load. Accreditation focus on the ratio of patient's volume to staff number to ensure effective and efficient outcome, and this would help if

there are lack of management skills which leads to defective control over the health care staff and so the responses to patients request. According to Elleuch in 2008 setting's appearance, process characteristics and verbal and nonverbal communication were the most related factors when outpatients judge health care quality. In conclusion, satisfying patient's requests, helping them, adopting courteous behavior and mediating trust and credence seem to make an impression on patients and represent a base for their evaluation. In assurance dimension analysis the difference based on hospital type mostly shown in trusting health care staff with advantage to accredited hospitals. Trust is achieved when the patient perceives more value than cost in undergoing health care procedure. Therefore, it is important that healthcare staff should be trained to be flexible – responsive and willing to provide a professional service (Owusu-Frimpong et al 2010). Moreover, Supporting by the hospital to the IPD had low loading from patient perception in non-accredited hospitals when comparing with accredited hospitals, which could be explained by the requirement of accreditation that concern with staff caring. Esteeming the positive implication of accreditation programs on the sense of safety and staff well being. Finally, reliability dimension had relatively similar results between the two types of hospital, which implies that whatever programs implemented sympathetic attendance to patients, dependable IPD services, punctual IPD staff, accurate IPD records are mandatory requirement in any health care institutions. However, accreditation programs rationally should focus on reliability dimension in order to significantly influence patient satisfaction. The complex nature of health service affects the patient evaluation of quality service. Therefore, it's important to enhance patient education about the tangible and intangible elements in hospital which contribute in improving service quality and it's important to deliver effective training and motivation for all staff to improve their skill in communication, work efficiently and better recognizing of patients need (Amin and Nasharuddin, 2013). In conclusion accreditation programs have shown a positive impact in improving patient's satisfaction. Thus, accreditation programs should be supported starting from managerial level, since accreditation build on clusters requirement which can't be achieved without management support. Therefore, healthcare professionals should be informed of the long-term beneficiary of accreditation programs

Future research

So far literature review needs to cover wide range of researches in Middle East, as distributive justice, managerial performance of health care staff, in order to build a base helping in designing national strategies those concerns of improving health service quality in an effective and efficient way.

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