

Perspective of Consumers and Providers Regarding Services Quality at Accredited and Non Accredited Primary Health Care Centers

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Abstract

Introduction: Assessment of the quality of care from the consumers and providers perspectives is a fundamental part of quality evaluation. **Aim** Measuring service quality from perspective of consumers and health care providers in accredited and non accredited primary health care centers at Sahel Seleem health district. **Study design:** A descriptive comparative. **Setting:** The study has been conducted in primary health care centers at Sahel Seleem health district. **Subjects and Method:** The study subjects consisted of two categories (640) consumers and (193) health care providers. The data collected through self-administered questionnaire which include socio demographic data and the service quality model (servperf) developed by (Cronin and Taylor, 1992). **Results:** The highest mean scores of consumers perspectives in favor of non accredited centers except in tangibles dimension and health unit characteristic and the highest mean scores of providers perspectives in favor of non accredited centers except in health unit characteristic. **Conclusions:** There were statistical significant differences between the consumers and the health care providers perspectives in all dimensions except tangibles dimension. **Recommendations:** Raise consumers and services providers awareness about services quality in the primary health care centers.

Key words: Primary Health Care Centers, Service Quality & Servperf.

Introduction

Primary health care (PHC) is the central part of the health system and the significant element of social and economic growth of each country and they should be equally available to all individuals in the society (Ataee et al., 2016).

An excellent primary healthcare system leads to a more efficient health system, lower rates of hospitalization and fewer health inequalities. The World Health Report (2008) stated that countries "are not doing as well as they could and as they should" when it comes to primary health care. The main challenge delaying countries from delivering primary health care services are establishing and maintaining high quality services (Russell, 2009).

Today, many organizations are in search of ways to gain competitive advantage through their products and services which are different from other organization. Providing quality services is the one of the fundamental strategies to accomplish this aim (McLelland et al., 2014).

The conceptualization of service quality includes both the service delivery process and the service outcome. The service outcome is consumer's assessment regarding the result of a service production process, the service delivery process concerns how the end result of the process is conveyed to the customer. This contains the way staff provide and complete their individual tasks, and their service delivery (Siew-Peng Lee & Sedigheh Moghavvemi, 2015).

Service quality has been defined as the difference between customers wants and what they actually obtain. High level of service quality leads to increase customer satisfaction and also service quality would preserve existing customers, attract new customers, and decrease costs (Laith & Feras, 2011).

Service quality is a vital issue in the healthcare sector, so that high quality health care service is the first priority of the health sector, due to dealing with life of people, improve the quality of services has unusual importance. Therefore, measurement and management of service quality is critical for healthcare organizations (Jabraeily et al., 2012).

The measurement of service quality can offer specific data that can be used in quality management; hence, service organizations would be able to check and sustain quality service. Assessing service quality and good understanding how different dimensions have an effect on overall service quality would allow organizations to proficiently design the process of service delivery. By detecting strong point and weakpoint pertaining to the dimensions of service quality organizations can improved allocation of resources to provide better service and ultimately good service to external consumers (Shahin, 2006).

Service qualities depend on the communication between clients and service providers. Customer views about the service provided, service quality or satisfaction, and might be measured. These days, the perception of quality has been changed due to customer awareness. To satisfy such customers,

service providers must understand the customer want by incorporating the voice of customer (Deoskar & Aruna 2010).

One increasingly active method for improving quality at the health care institutional level is accreditation. In spite of its routine use in the work course of the majority hospitals globally, in recent times accreditation has been introduced into the primary health care setting in developed countries. This current emphasis on accreditation in primary health care organizations came with the transfer in healthcare policy from hospitals towards protective and primary healthcare sectors (EL-Jardi et al., 2014).

Significance of the study

Most studies of consumer perspective of quality have been conducted in developed countries. While slight attention has been given to the quality of primary health care services in developing countries. The importance of considering the perspective of the consumers when assessing and designing health care programs is now widely recognized (Hekkink et al., 2003), so that identifying the differences between providers and consumers perceptions of service quality is important issue because it reflects what providers believe in quality of services and what level of quality services will satisfy the consumers. In Egypt, few studies have shed light on perception of consumers and providers regarding services quality in primary health care centers, so the researcher felt necessary to study this phenomena to identify the quality level of actual services perceived by consumers and providers at accredited and non accredited primary health care centers Sahel Seleem health district.

Aim of the study

The present study was conducted with the aim of measuring service quality from perspective of consumers and health care providers in accredited and non accredited primary health care centers at Sahel Seleem health district.

Research questions

the current study seeks to answer the following questions:

- What are the differences between consumers and providers perspectives regarding dimensions of quality?
- What are the differences between the level of services quality in accredited and non accredited primary health care centers?
- Which dimension is the best indicator of overall service quality?

Subjects & Method

Technical design

This design involves the research design, setting, subjects, and data collections tools.

Research design

The present study was carried out using comparative design.

Study setting

The present study was conducted in primary health care centers affiliated to Ministry of Health at Sahel Seleem health district divided into five accredited primary health care centers namely : Al-Afadra , Al-Awana , Al-Matmar , Al-Nazla Al-Mostagadda , Bowait and five non accredited primary health care centers namely : Al-Gamaila, Al-Shameia, Al-Ghoraieb, Dair-Tasa, Arab Motair Al-Matmar .

Study subjects

The sample consisted of two categories: all health care providers (193) (physicians (30), nurses (96), technicians (38), and administrative personnel (31) working in primary health care centers and consumers (640) attended this centers during the period of data collection (six months).

Data collections tools

The data needed for the study was collected using service quality model (servperf) .

The study tool is a self -administered questionnaire which comprised three parts:

1st part related to socio demographic data sheet of consumers: including ,name of primary health care centers, ,age, gender, marital status, occupation, educational qualification, , and cause of visit.

2nd part related to socio demographic data sheet of health care providers: including, name of primary health care centers, age, gender, occupation, marital status, educational qualification, and years of experience.

3rd part related to service quality model (servperf)

It was developed by (Cronin & Taylor, 1992) and modified by Musleh, (2011): and adopted by the researcher. It was used to measure the quality of perceived and actual services. It consisted of 28 statement divided into 7 dimensions classified as the following: Tangibles (4 items), Reliability (5 items), Assurance (4 items), Responsiveness (4 items), Empathy (5 items), health unit characteristic (5 items), and satisfaction of service quality (1 item).

Scoring system

The responding scoring system was measured by using 3 point likert scale agree (3), neutral (2), and disagree (1).

Administrative design

Official approval to carry out this study was obtained from the Dean of Faculty of Nursing - Assiut University , The Ministry of Health Representative in Assiut, The director of Sahel Seleem health district

,The managers of the health centers ,and head nurse of each health centers to collect the necessary data .

Operational design

Preparatory phase

This phase consumed about one year from "August 2015 to February 2016", and include reviewing the relevant literatures concerning the study topics to end the proposal of the study. Additionally, Arabic translation of the study tool into Arabic language was done.

Ethical considerations

The oral agreement was taken from the participants .confidentiality of obtained data was assured, and the purpose, nature, and the aim of the study was explained to all participants before starting of data collections. No risk for study subjects during application of research. Participants have the right to refuse to participate and withdraw from the study without any rational at any time.

Pilot study

A pilot study had been conducted to test the questionnaire regarding to feasibility and applicability and for time estimation .It applied for 20 health care providers and 84 consumers that represent 10%of the total sample size. The pilot study data were analyzed using SPSS version 19 (Statistical Package for Social Science).No changes were done after the pilot study, so the subjects included in the pilot study was included in the total study sample.

Data collection tool

The researcher met with the study participants individually to explain the purpose of the study, and then seek their participation .After obtaining verbal consent to participate in the study, the study tool was given to the study subjects to be filled through a self – administered questionnaire. The study tool took about fifteen minutes. Data collection lasted for 6 months (from March - August 2016).

Statistical design

Date entry and data analysis were done using SPSS version 19. Data were presented as number, percentage, mean and standard deviation. Mann-Whitney test was used to compare quantitative variables between two groups and Kruskal Wallis test for more than two groups in case of non-parametric data. P-value considered statistically significant when $P < 0.05$.

Result**Table (1):** Socio demographic characteristics of the studied consumers at the primary health care centers, (n= 640).

Item	No. (n= 640)	%
Age: (years)		
< 25	150	23.4
25 - < 30	218	34.1
30 - < 35	145	22.7
≥ 35	127	19.8
Mean? ± SD (Range)	29.49 ± 7.14 (15.0 – 58.0)	
Gender		
Male	106	16.6
Female	534	83.4
Marital status		
Single	35	5.5
Married	602	94.1
Widow	1	0.2
Divorced	2	0.3
Occupation		
Housewife	477	74.5
Farmer	23	3.6
Employee	83	13.0
Free business	11	1.7
Skilled worker	16	2.5
Unemployed	20	3.1
Educational qualification		
Illiterate	61	9.5
Read & write	26	4.1
Primary school	38	5.9
Preparatory school	85	13.3
Secondary school	316	49.4
Technical Institute	47	7.3
High education	67	10.5
Cause of attendance		
Pregnancy follow-up	159	27.1
Child follow-up	118	18.4
Child vaccination	124	19.4
Family planning	95	14.8
Emergency services	80	12.5
Outpatient services	77	12.0
Health education	31	4.8

Table (2): Socio demographic characteristics of the studied health care providers at the primary health care centers, (n= 193).

Item	No. (n= 193)	%
Age: (years)		
< 25	17	8.8
25 - < 30	57	29.5
30 - < 35	30	15.5
≥ 35	89	46.1
Mean ± SD (Range)	35.67 ± 10.21 (20.0 – 61.0)	
Gender		
Male	70	36.3
Female	123	63.7
Occupation		
Physician	19	9.8
Nurse	93	48.2
Technician	44	22.8
Administrative	37	19.2
Marital status		
Single	32	16.6
Married	154	79.8
Widow	6	3.1
Educational qualification		
Secondary school	125	64.8
Technical Institute	38	19.7

Table (2 cont.): Socio demographic characteristics of the studied health care providers at the primary health care centers , (n= 193).

Item	No. (n= 193)	%
High education	30	15.5
Years of experience		
< 10 years	66	34.2
10 – 15 years	56	29.0
> 15 years	71	36.8
Mean ± SD (Range)	13.84 ± 8.83 (1.0 – 38.0)	

Table (3): Mean scores of service quality dimensions as perceived by the study consumer in accredited and non accredited primary health care centers (n= 640).

Service quality dimensions	Primary health care centers		P-value
	Accredited (n= 330)	Non-accredited(n= 310)	
	Mean ± SD	Mean ± SD	
1. Tangibles	9.10 ± 1.69	9.04 ± 2.39	0.810
2. Reliability	9.66 ± 1.47	10.30 ± 1.75	0.000*
3. Responsiveness	7.20 ± 1.65	7.35 ± 2.47	0.762
4. Assurance	8.35 ± 1.47	8.87 ± 1.61	0.000*
5. Empathy	10.23 ± 1.34	10.75 ± 1.94	0.342
6. Health unit characteristic	11.47 ± 1.17	11.11 ± 1.84	0.030*
7. Satisfaction of service quality	1.78 ± 0.60	1.95 ± 0.69	0.001*

Table (4): Mean scores of service quality dimensions as perceived d by the study health care provider in accredited and non accredited primary health care centers (n= 193).

Service quality dimensions	Primary health care centers		P-value
	Accredited (n= 193)	Non-accredited (n= 100)	
	Mean ± SD	Mean ± SD	
1. Tangibles	9.30 ± 2.17	9.39 ± 2.25	0.717
2. Reliability	12.22 ± 2.03	12.63 ± 2.05	0.135
3. Responsiveness	10.18 ± 1.73	10.59 ± 1.57	0.070
4. Assurance	10.26 ± 1.64	10.75 ± 1.37	0.025*
5. Empathy	12.74 ± 1.86	13.03 ± 1.79	0.261
6. Health unit characteristic	12.47 ± 1.94	12.19 ± 2.00	0.314
7. Satisfaction of service quality	2.24 ± 0.63	2.28 ± 0.74	0.482

Table (5): Mean scores of service quality dimensions as perceived by the health care providers and the consumers in accredited and non accredited primary health care centers (n= 833).

Service quality dimensions	consumers (n= 640)	Health care providers (n= 193)	P-value
	Mean ± SD	Mean ± SD	
1. Tangibles	9.07 ± 2.06	9.35 ± 2.20	0.097
2. Reliability	9.97 ± 1.64	12.43 ± 2.05	0.000*
3. Responsiveness	7.27 ± 2.09	10.39 ± 1.66	0.000*
4. Assurance	8.60 ± 1.56	10.51 ± 1.52	0.000*
5. Empathy	10.48 ± 1.68	12.89 ± 1.82	0.000*
6. Health unit characteristic	11.29 ± 1.54	12.33 ± 1.97	0.000*
7. Satisfaction of service quality	1.86 ± 0.65	2.26 ± 0.69	0.000*

Table (6): Relationship between educational qualifications of health care providers and service quality dimensions (n= 193).

Service quality dimensions	Educational qualification			P-value
	Secondary school (n= 125)	Technical Institute (n= 38)	High education (n= 30)	
	Mean ± SD	Mean ± SD	Mean ± SD	
1. Tangibles	9.68 ± 2.23	8.82 ± 2.04	8.63 ± 2.06	0.011*
2. Reliability	12.70 ± 1.91	12.08 ± 2.07	11.73 ± 2.39	0.051
3. Responsiveness	10.69 ± 1.33	10.16 ± 1.57	9.47 ± 2.49	0.040*
4. Assurance	10.75 ± 1.31	10.45 ± 1.37	9.60 ± 2.13	0.013*
5. Empathy	13.02 ± 1.72	12.87 ± 1.80	12.40 ± 2.22	0.486
6. Health unit characteristic	12.57 ± 1.87	12.61 ± 1.90	10.97 ± 2.01	0.000*
7. Satisfaction of service quality	2.28 ± 0.71	2.26 ± 0.64	2.17 ± 0.65	0.635

Table (1): Showed that a high percent of the consumers were married, female and housewife (94.1%, 83.4% & 74.5%) respectively. Slightly below half (49.4%) of them graduated from secondary school. (27.1%) of them attended primary health care units for pregnancy follow up. The mean age of them was (29.49) years old.

Table (2): Showed that a high percent of the health care providers were married, graduated from secondary

school and female (79.8%, 64.8% & 63.7%) respectively. Slightly below half of them worked as a nurse (48.2%) and more than one third of them having more than 15 years of experiences. Their mean age was (35.67) years old.

Table (3): Showed that there were statistical significant differences between the study consumer's perspectives in accredited and non-accredited primary health care centers regarding reliability, assurance, health unit

characteristic and satisfaction of service quality. The highest mean scores of consumers perspectives in favor of non-accredited centers except in tangibles dimension and health unit characteristics ($p \leq 0.05$).

Table (4): Showed that there is no statistical significant difference between the study health care providers perspectives in accredited and nonaccredited primary health care centers regarding all dimensions except assurance dimensions. The highest mean scores of health care provider perspectives in favor of nonaccredited centers except in health unit characteristic ($p \leq 0.05$).

Table (5): Showed that there was a statistical significant difference between the consumers and the health care providers perspectives in all dimensions except tangibles dimension. From consumers and providers perspectives, health unit characteristic is the best indicators of service quality. The highest meanscores of service quality dimensions in favor of health care providers perspectives ($p \leq 0.05$).

Table (6): Showed that the highest mean scores were among secondary school as regard to all dimension of service quality. There were statistical significant differences between educational qualification of health care providers and all dimension of service quality except in reliability, empathy and satisfaction of service quality ($p \leq 0.05$).

Discussion

Providing high-quality care and ensuring consumers complete satisfaction is a challenge that healthcare institutions face globally. Exploring the quality of care from the consumers and providers perspectives is a vital part of quality evaluation. The importance of exploring the consumers perspectives of quality of care in order to fulfill consumers needs and expectations at a satisfactory level. Measuring the quality of nursing care from the consumers' perspective is an essential part in quality evaluation **Zhao & Akkadechanunt, (2011)**.

The study finding revealed that the majority of the study consumers were female and housewives. This might be attributed to female visit health centers for different services, pregnancy follow up, child follow up, and family planning services. This finding consistent with **Ataee, et al., (2016)** who found that the majority of people visits health centers to receive primary health care services were women and housewives because females utilize these facilities for themselves and for their children.

The study finding revealed that the highest mean scores of consumers perspectives regarding service quality dimensions in favor of non accredited centers. This might be attributed to availability of physicians, good performance of staff and providers in non accredited centers pay attention for customers needs and expectations. This finding was consistent with

Harnagle, (2014) who illustrated that majority of patients are satisfied with the availability of physicians in the hospital during the working hours and that they don't leave the hospital for other duties.

In addition this finding was consistent with **Sack et al., (2011)** who studied the relationship between hospitals' accreditation status and patient satisfaction and found that hospital accreditation is a step towards overall quality management and it was not necessarily a vital factor for quality of care.

The study finding revealed that there were statistical significant differences between the consumers and the health care providers perspectives regarding service quality dimensions except tangibles dimension. This might be attributed to both consumers and health care providers perceive lack of material associated with the services and the management of the health centers need to give attention to physical facilities, appearance of personnel, and materials associated with the services. This finding was consistent with **Hansen et al., (2008)** who mentioned that clients' perceptions of quality were sensitive to physical conditions of the health facility. Service capacity and the availability of equipment were associated with client perceptions of quality and the health centers should give attention to the infrastructure, physical aspect, and material necessary to the services.

In addition this finding was in contrast with **Haj-Ali et al., (2014)** who evaluate patients satisfaction in accredited and non accredited hospitals and said that patient more satisfied with the hospital's appearance, physical facilities and equipment and rather than the processes and outcomes of care.

The study finding revealed that the highest mean scores of service quality dimensions in favor of health care providers perspectives. This might be attributed to the fear of the health care providers of the accusation of negligence in the performance of the service. This finding was consistent with **Kaba et al., (2015)** who mentioned that the health staff satisfied with level of service quality provided in primary health facilities due to tendency of health staff to give more favorable answers to keep "a good name" for their facilities or perhaps health staff were complacent of their efforts towards quality of service provided.

The finding of the current study revealed that there was statistical significant differences in health care providers perspectives regarding service quality dimensions according to educational qualification and the highest means scores of all service quality dimensions found among secondary school. This might be attributed to educational level of health care providers influence their assessment of service quality. This finding was agreement with **Abiodun, (2006)** who mentioned that participant with education above secondary level have higher likelihood of interaction

with advance health facilities normally associated with tertiary institutions, , therefore they are most likely to possess a more sophisticated view of quality of care, one that encompasses structure, process and outcome of care so that there was difference between the different health care providers categories on the measures of perception of service quality .

Conclusions

It was conclude that among studied subjects there were statistical significant differences between the study consumers perspectives in accredited and non accredited centers regarding all dimensions except tangibles, responsiveness and empathy dimensions. While, there is no statistical significance differences between the study health care providers perspectives in accredited and non accredited centers regarding all dimensions except assurance dimensions. In addition there was a statistical significant difference between the consumers and the health care providers perspectives in all dimensions except tangibles dimension. Moreover, Consumers perceived insufficient number of physicians (specially female gynecologist), lack of materials and supplies and buying drugs from outside the health centers as barriers of services quality.

Recommendations

In the light of the study results, the following recommendations are suggested

- Raise consumers and services providers awareness about services quality in the primary health care centers.
- Provide the primary health care centers with sufficient supplies and equipment necessary for improving services quality.
- Use communication skills effectively with consumers to ensure proper quality of services.
- Communicate with decision makers in the ministry of health to provide female physicians in the primary health care centers.
- Manager in accredited centers should pay attention for customers' needs and expectations and adopt complementary measures that aim to improve service quality.

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