

Service Quality In Healthcare: A Literature Review

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Abstract: Healthcare needs to be sustainable as the demands are increasing and the resources are limited (Faezipour and Ferreira, 2013). Factors like rising income levels, ageing population, growing health awareness and changing attitude towards preventive healthcare are going to boost the demand of healthcare services in future. Today's consumers are more aware and motivated to process the available information related to healthcare services. The main goal of healthcare system is to offer services to improve quality of life and health of people. Patients are the major focus of any healthcare system. They are the customers of healthcare system with various expectations. Health care institutions are required to go beyond a medical view and should have holistic social approach. Just accurate diagnosis and treatment are not enough, patients need performance in each and every services they receive (Angelopoulou et al., 1998). So it is required to check quality of the healthcare services provided from the patients' perspectives. The findings suggest that the scale for the measurement of healthcare service quality should be modified according to the setting that has been studied.

Keywords: Service quality, health care services, SERVQUAL

I. INTRODUCTION

The service quality concept has two major views: Nordic view/European school of thought (developed by Gronroos, 1984) and the American view (developed by Parasuraman et al., 1985).

The Nordic view explains service quality with two dimensions: Functional quality and Technical quality (Donabedian, 1980). Technical quality can be defined on the basis of technical accurateness of the medical procedures and diagnoses whereas functional quality refers to the manner in which the service is delivered to the patients (Donabedian, 1980). European school of thought overlooks the importance of physical environment of the service encounter. American school of thoughts considers service quality as the difference between the overall gap in the perception and expectation of service delivery (Parasuraman et al., 1985, 1988, 1991, and 1994). Also, according to American view, service quality has five dimensions: tangibility, reliability, responsiveness, empathy and assurance. In the very beginning, Parasuraman et al, (1985) in the study: A conceptual model of service quality and its implications for future research derived ten dimensions

of service quality; Reliability (consistency of performance and dependability), responsiveness (willingness of employees to provide service), competence (required skills and knowledge to carry out the service), access (accessibility and ease of reach), courtesy (politeness, respect, consideration and friendliness of staff), communication (keeping customers informed in a language they can understand, listening to them), credibility (trustworthiness, believability, honesty), security (freedom from danger, risk, doubt), understanding the customer (making efforts to understand needs of customers), tangibles (physical aspects of service, appearance of personnel, tools, equipment) that consumers use in forming expectations and perceptions about the services. After that Parasuraman et al, (1988) developed a five dimensional SERVQUAL model with the service quality dimensions as tangibility, reliability, responsiveness, assurance and empathy.

The SERVQUAL model provided a comprehensive conceptualization of service quality with an instrument to measure perceived service quality. (Parasuraman et al., 1991, 1994; Angur et al., 1999). Parasuraman et al. (1988) have defined service quality as the gap between customers' expectations of service and perception of their service

experience. They have proposed SERVQUAL model to assess perceived service quality for various sectors. Rust and Oliver (1994) developed a three dimensional concept of service quality with service product, service environment and service delivery as dimensions. The SERVQUAL model framework has been applied to many areas. The following table represents various Studies on application of SERVQUAL in different service industries.

| Sr. No. | Industry | Studies |
|---------|--|--|
| 1 | Healthcare | Carman (1990); Babakus and Boller (1992); Cronin and Taylor (1992); Brown et al. (1993); Anderson(1995); Dabholkar et al. (1996); Youseff (1996); Lam (1997); Sewell (1997); Angelopoulou et.al.(1998); Cheng and Tang(2000); Wong (2002); Jabnoun and Chaker(2003); Rohini and Mahadevappa (2006); Ramsaran-Fowdar (2008) |
| 2 | Banks | Howcroft (1993) ; Blanchard and Galloway (1994); Bahia and Nantel (2000) ; Lassar et al., (2000); Zhu et al. (2002); Sureshchandar et al. (2002a) |
| 3 | Retailing | Teas (1993); Finn and Lamb (1991); Tsai and Huang (2002); Dabholkar et al. (1996); Trocchia & Janda (2003); Long & McMellon (2004); Bhaskar and Shekhar (2011); Naik et al. (2010); Kumar A.et al. (2012) |
| 4 | Fast Foods | Lee and Ulgado (1997) |
| 5 | Airline Service | Natalisa and Subroto (1998) |
| 6 | Hotel | Ingram and Daskalais (1999) |
| 7 | Library services at Yale University | Nitecki and Hernon (2000) |
| 8 | Logistics service quality | Mentzer et al. (2001) |
| 9 | Spanish public services like university and hospital | Bigne et al. (2003) |
| 10 | Higher education | Mai (2005) |
| 11 | Hospitality and Tourism | Akan (1995); Parasuraman et al. (1985), Alexandris et al. (2002); Akama and Kieti (2003); Nadiri and Hussein (2005) |
| 12 | Information system | Jiang et al. (2000); Carr (2002) |
| 13 | Insurance industry | Stafford et al. (1998); Leste and Vittorio, (1997); Mehta |

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| | | et al.(2002); Goswami (2007); Gayathri et al.(2005); Siddiqui et al. (2010) |
| 14 | Telecommunications | Van der Wal et al. (2002) |
| 15 | Gaming industry | Wu and Hsu (2012) |

Table 1: Studies on application of SERVQUAL In various service industries

SERVQUAL is a reliable and valid model in the hospital environment (Babakus and Mangold, 1992) and suitable instrument to analyze the perceptual gap in understanding patient expectations (O'Connor et. al., 2001). It is a useful model to measure the differences between patients' preferences and their actual experiences (Pakdil and Harwood, 2005). It is 'parsimonious' and has standardized analysis procedure to aid interpretations and results in hospital setting (Rohini and Mahadevappa, 2006). It helps to understand what the customers' value is all about and how well an organization meets the needs and expectation of consumers of hospitals (Chunulaka, 2010).

II. SERVICE QUALITY IN HEALTH CARE

The quality of health care services can be defined as the degree to which health services increase the likelihood of desired health outcomes and consistent with current professional knowledge (Institute of Medicine, 2001, p. 21). Service quality research has gained much of the attention in today's era but due to intangible nature of services, it is extremely difficult to define and measure service quality (Boltan and Drew, 1991; Boulding et al., 1993). Also, service quality in health care is very complex as compared to other services because health care sector greatly involves risk (Rashid & Jusoff, 2009). Service quality receives special attention because it is within the control of the service provider and by improving quality; customer satisfaction could be improved (Padma et al., 2010). Service quality not only influences the satisfaction of buyers but also their purchase intentions and thus, delivering quality service is essential to drive satisfaction. (Padma et al., 2010). Quality of the relationship between patients and doctors has a considerable impact on the patient satisfaction measure (Moret et al., 2008; Mercer et al., 2008; Alhashem et al., 2011).

Various studies have been carried out to assess service quality in hospital sector in various countries. Majority of the studies have used the well-known SERVQUAL model directly or with modified dimensions. Following table represents various studies with same and/or modified dimensions of SERVQUAL model.

| Sr. No. | Author(s) | Factors/Dimensions/Attributes of Healthcare quality |
|---------|----------------------------|---|
| 1 | Donabedian (1966) | Proposed seven attributes of healthcare quality: efficacy, effectiveness, efficiency, optimality, acceptability, legitimacy, and equity |
| 2 | Takeuchi and Quelch (1983) | Six dimensions: reliability, service quality, prestige, durability, punctuality and ease of use |

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| 3 | Maxwell (1984) | Six dimensions: accessibility, relevance, effectiveness, equity, social acceptability and efficiency |
| 4 | Jun et al. (1988) | Identified eleven dimensions of quality of health care. Eight dimensions are part of the SERVQUAL model (Parasuraman et al., 1985) and other three are caring (personal and human involvement), patient outcomes (relief from pain, saving of life, anger or disappointment with life after medical intervention) and collaboration. |
| 5 | Schmner (1986) | Six dimensions for quality evaluation: Tangibles, responsiveness, recovery, knowledge, accessibility and flexibility |
| 6 | John (1989) | Three dimensions of healthcare service quality: caring, access and physical environment |
| 7 | Carman (1990) | Confirmed admission, tangibles accommodation, tangible food, tangible privacy, nursing, explanation visitor access, courtesy, discharge planning, and patient accounting as the dimensions of perceived service quality. |
| 8 | Reidenbach E. R. and Smallwood B. S (1990) | Used ten dimensions of tangibles, accessibility, understanding, courtesy, reliability, security, credibility, responsiveness, communication and competence |
| 9 | Vandamme and Leunis (1993) | According to authors tangibles, medical responsiveness, nursing staff quality, assurance and personal beliefs and values are dimensions of hospital service quality |
| 10 | Haddad, Fournier and Potvin (1998) | Developed and validated a 20-item instrument for use in Guinea with the dimensions, like health care delivery, personnel, health facility, overall services, personnel's technical competence, effectiveness of care, personnel's attitudes and conduct, availability and adequacy of resources and accessibility of services |
| 11 | Andaleeb (2001) | Explored five dimensions of perceived quality of care: responsiveness, assurance, communication, discipline, and 'bribe money' paid to health staff |
| 12 | Brady and Cronin (2001) | Three dimensions: interaction quality, physical environment quality, and outcome quality |
| 13 | Baltussen et | Proposed five dimensions: health |

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| | al. (2002) | personnel practices and conduct, adequacy of resources and services, healthcare delivery, financial, and physical accessibility of care |
| 14 | Sohail (2003) | Five dimensions: tangibles, reliability, responsiveness, assurance, and empathy |
| 15 | Otani and Kurz (2004) | Admission process, physician care, nursing care, compassion to family and friends, pleasantness of surroundings, and discharge process |
| 16 | Duggirala et al. (2008) | Seven dimensions: personnel quality, infrastructure, administrative process, process of clinical care, safety, overall experience of medical care, and social responsibility |
| 17 | Arasli et al. (2008) | Six service quality dimensions in public and private hospitals as empathy; giving priority to the inpatient needs, relationship between staff and patients, professionalism, food and the physical environment |
| 18 | Kim et al., (2008) | Four dimensions of service quality: medical doctor, procedure of care, hospital facility and reliability |
| 19 | Aagja and Garg (2010) | Five dimensions like admission, medical service, overall service, discharge and social responsibility |
| 20 | Padma et al. (2010) | Eight dimensions like infrastructure, personnel quality, process of clinical care, administrative procedures, safety indicators, hospital image, social responsibility, trustworthiness |
| 21 | Chahal and Kumari (2010) | Three dimensions: physical environment, interaction quality and outcome quality |

Table 2: Studies using SERVQUAL and/or modified SERVQUAL

III. CONCLUSION

The factor structure for the same sector, i.e. hospital sector is not constant in different countries and/or areas. It varies from one region to another and from one sector to another sector. Numerous studies have used SERVQUAL model in various service settings and it has been noticed that there is no standardized scale for measuring service quality. The scales are not generic and they may not be able to capture industry specific dimensions underlying the quality perceptions (Carman, 1990; Finn and Lamb, 1991; Cunningham and Young, 2002; Zhao et al., 2002; Banwet and Datta, 2002). It is suggested that when service quality is adapted to various industries, previous dimensions may need

to be modified and/or deleted or new factors specific to the particular service industry may need to be added (Carman, 1990). Service quality relationship varies from industry to industry (Taylor and Baker, 1994). According to Reynoso and Moore (1995) as SERVQUAL dimensions are somewhat applicable, researchers should keep some of the more generic SERVQUAL dimensions, but other dimensions should also be added according to a specific situation. SERVQUAL is considered to be a useful and valid instrument to measure service quality, although it requires subsequent refinement of quality dimensions relevant to service considered (Curry, 1999). Although the SERVQUAL model dimensions have been used and validated in western context, we cannot neglect the fact that the cultural differences of consumers would likely influence its applicability (Amin and Zahora, 2013). The service quality measures which are developed in one culture may not capture the same service quality sentiments of consumers from other culture (Kettinger et al., 1995; Karatepe et al., 2005; cited in Ladhari, 2008). Also there is a difference between private hospital, government hospital and foreign hospital however they are providing the complementary products and services and competing in the same market (Taner and Antony, 2006). There is a need to modify the dimensions according to the health care setting being studied. Many of the studies have moved their effort from adaption of SERVQUAL model to the development of industry specific measure (Ladhari, 2008). The SERVQUAL instrument has been empirically evaluated and found to be valid and reliable for the hospital setting (Babakus and Mangold, 1992). In some studies, it has been modified by dropping irrelevant dimensions or adding relevant dimensions (Sohail, 2003; Fowdar, 2005). It is advised that SERVQUAL should be adapted as required (Parasuraman et al., 1988). The construct of health care service quality has different factor structures in different studies. Thus, further testing and validation is required before any one factor structure has been accepted for the construct of the health care service quality (Aagja, & Garg, 2010). Majority of the studies have been done in the developed country context, which cannot be generalized to the Indian context. According to the requirement of the industry/sector, the dimensions are added and/or modified to fit the industry specific characteristics. Thus, it is suggested that, SERVQUAL model dimensions should be modified and validated according to the industry setting being studied.

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