CHAPTER 2

LITERATURE REVIEW

This chapter presents a review of the research literature. The chapter has been divided into the following sections:

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Service Quality

Definitions and Concepts Related to Service Quality

Service quality is a widespread concept which is applied in various service sectors and the concept has been defined in various forms. Service quality can be defined as providing consumers something which is intangible that it gives them value and feeling of satisfaction (Brysland & Curry, 2001). Service is referred as intangible, as consumers cannot assess a service before they are purchased and to obtain services consumers buy performances rather than objects (Dalrymple & Parsons, 2000).

Service quality was conceptualized according to Parasuraman et al. (1985), as the result of consumer's comparison of expected service with perception of actual performance of the service. Expectations are wants or desires of the consumers that they feel should be offered to them rather than what would be offer to them by service providers and the perception of performance is consumers' evaluation regarding a service which is performed (Parasuraman et al. 1988).

Similar definitions for service quality as given by Parasuraman et al. (1985) are provided by other authors. Service quality is the difference between customers' perception of service expectation before encountering a service and perception of service performance after experiencing the service (Asubonteng, McCleary & Swan, 1996). Wisniewski and Donnelly (1996) described overall service quality indicates that the services are meeting the needs and expectation of consumers.

According to Gronroos (2001) perceived service quality is mixture of technical quality, functional quality and image of the service provider. In addition Gronroos (2000) stated that level of total perceived quality cannot be determined only

by using technical and functional dimensions, but by measuring the gap between expected and experienced quality. In contrast to this, Cronin and Taylor (1992) conceptualized perceived service quality as consumers' attitude towards a service. According to Cronin and Taylor (1992) current performance will be adequate to capture service quality of the service provider.

In summary, the definition of service quality had been extensively studied and defined similarly and differently in terms of scope and dimensionality. For this study researcher adapted definition of service quality by Parasuraman et al. (1985) to be integrated in the definition of nursing service quality. Nursing service quality was defined in this study as the result of difference between expected nursing service quality and perception of performance of nursing service quality by nurses and patients.

Dimensions of Service Quality

Service quality is a multidimensional concept. Scholars identified dimensions of service quality in different ways depending on service sectors. Schmnner as cited in Owusu-Frimpong and Nwankwo (2010) identified six critical dimensions for evaluating service quality. The six dimensions are tangibles, responsiveness, recovery, knowledge, accessibility and flexibility. Similarly, Evans and Lindsay as cited in Sower, Duffy, Kilbourne, Kohers and Jones (2001) identified eight dimensions of service quality, which are time, timeliness, completeness, courtesy, consistency, accessibility and convenience, accuracy and responsiveness. According to Gronroos (2000) service quality as perceived by consumers has two

dimensions; technical or outcome dimension and functional or process related dimension.

Over the past years several dimensions which are more specific for health service quality or hospital service quality has been developed. Aagja and Garg (2010) proposed that perceived service quality for public hospitals in the Indian context need to be measured using five dimensions such as admissions, medical service, overall service, discharge process and social responsibility. Dimensions for assessing service quality in hospitals were proposed by developing Key Quality Characteristic Assessment for Hospitals (KQCAH) scale. The dimensions integrated in the scale are respect and caring, effectiveness, continuity, appropriateness, efficiency, timeliness, availability and safety (Sower et al., 2001). Moreover, Raja, Deshmukn and Wadhwa (2007) developed service quality model for measuring health service quality, using Malcolm Baldrige National Quality Award, European Foundation for Quality Management and Kanji Business Excellence Model. The model consists of four basic elements namely; driver, system, measures of progress and goal. The dimensions in the service quality model are leadership, resource management/measurement, people management, process management and customer satisfaction.

In a service quality scale for surgical hospitalization (SQSH) which was developed for identifying accurate service dimensions for surgical hospitalizations identified six dimensions which are; needs management, assurance, sanitation, customization, convenience and quiet and attention (Teng, Ing, Chang & Chung, 2007). According to Teng et al. (2007), the need management dimension indicates pain management, visiting patient and inspecting personal needs, assurance dimension is related to ability of hospital staff to create patient trust and confidence in the

hospital staff. The sanitation dimension describes cleanliness of the ward; customization indicates degree to which hospitalization process can be adjusted based on specific individual needs. The convenient and quite dimension is related to degree to which patients see staying in the hospital as convenient and quite. The attention dimension describes extent to which hospital staff pays attention to patients rather than ignoring them.

Koerner (2000) developed dimensions for assessing service quality of inpatient nursing services. The dimensions included were compassion, individualized care, close relationships, uncertainty reduction and reliability. According to Koerner (2000) compassion describes the degree to which nurses show sincere caring, kindness and respect to patients. Individualized care indicates the degree to which nurses develop a clear, in-depth understanding of each patient's life situation and provide care and treatment consistent with patient's unique needs and circumstances. The close relationships show the degree to which nurses develop interpersonally close relationships with patients characterized by mutual liking and casual, enjoyable, open interactions. The uncertainty reduction was described as the degree to which nurses regularly assess patients' needs for information, inform them of upcoming events, interpret information from other sources and provide information to increase patients' sense of control. The reliability was defined as the degree to which nurses follow through on commitments made to patients, provide prompt service and perform nursing tasks accurately and completely.

Though several dimensions and models of service quality have evolved within health care setting, literature had shown that that conceptual model of service quality-the Gap Analysis Model developed by Parasuraman et al. (1985) as the most

widely applied model for assessing service quality of various aspects within health care. This service quality model incorporates five gaps. According to Parasuraman et al. (1985) the gap 1 indicates differences between consumer expectation and management perception of consumer expectation. Gap 2, of the model demonstrates difference between management perception of consumer expectations and service quality specifications. The gap 3 indicates differences between service quality specification and service actually delivered. Gap 4 of the service quality model implies differences between service delivery and what is communicated about the service to consumers. The gap 5 of the model shows difference between consumer expectations and perception about service delivery. The gap 5 is known as the perceived service quality gap and it is linked with the four other gaps which are from the service providers' side (Rashid & Jusoff, 2009).

According to Parasuraman et al. (1988) perceived service quality can be assessed in service-providing organizations with the use of SERVQUAL scale which consists of five dimensions. Definitions for the five dimensions as provided by Parasuraman et al. (1988) are described as follows.

1. Tangible include the physical evidence of services such as physical facilities, equipment and adequate appearance of employees.

2. Reliability involves maintaining consistency of performance and ability to perform the service dependably and accurately. This dimension describes service providers fulfilling their promises, providing reassurance and sympathy when customers encounters problem during service delivering process.

3. Responsiveness concerns the willingness to provide services to customers by considering timeliness of services. This dimension describes helping

customers willingly, promptly and dealing with customer related issues without showing that service providers are too busy.

4. Assurance means knowledge and courtesy of employees and their ability to convey trust and confidence to customers through competence, creditability and security. This dimension indicates giving assurance about services, being polite to customers, providing services with sense of duty and service providers possessing skill and knowledge needed for performing tasks in the services.

5. Empathy is providing caring and individual attention to customers by employees. This dimension focuses on for respecting each customer's personality, to have customers' best interest at heart and providing services according to customers' convenience.

Service quality studies conducted in the health care had shown that some researchers utilized SERVQUAL five dimensions in their research while other researchers modified the dimensions to fit into their research. A study conducted in Bangladesh identified service quality factors that are important for patients and the identified factors consisted of two SERVQUAL dimensions which are responsiveness and assurance. Additional factors identified include communication, discipline and baksheesh (Andaleeb, 2001). In a study which included randomly selected physicians via national database leased from American Medical Association identified physician's perception towards health care service quality and developed a modified SERVQUAL scale. This modified SERVQUAL scale included five dimensions from original SERVQUAL scale and included additional two dimensions which are core medical service and professionalism/skill (Lee et al., 2000). Additionally, Conway and Willcocks (1997) developed a conceptual model applicable for examining health

care service quality from patients' perception. This model incorporated five dimensions of SERVQUAL scale and other dimensions as access, choice, information, redress and representation. Moreover, Lim and Tang (2000) added accessibility and affordability to the SERVQUAL dimensions in their study which focused on identifying patients' expectations and satisfaction in Singapore hospitals.

Since, nursing services are broad and multidimensional they can be categorized to fit into five dimensions provided in the SERVQUAL scale for ensuring nurses provide and patients receive quality nursing service. As such the tangible dimension can be applicable in nursing service quality to assess nurses' appearance, physical facilities and equipment used for providing nursing service. Reliability dimension can be used to assess nurses' ability to perform nursing service consistently, dependably and accurately. The responsiveness dimension can be applied to examine nurses' willingness to provide prompt service and their attentiveness in dealing with patients' related problems. Assurance dimension can facilitate to assess knowledge and courtesy displayed by nurses and their ability to inspire patients trust and confidence. Moreover, the empathy dimension can be used assess caring and individualized attention provided to patients by nurses.

Measurement of Service Quality

According to the literature review there are several instruments developed for measuring various aspects of health care service quality such as Service Quality scale for Surgical Hospitalization (SQSH) (Teng et al., 2007), Key Quality Characteristics Assessment for Hospitals (KQCAH) scale (Sower et al., 2001), Inpatient Nursing Service Quality (INSQ) scale (Koerner, 2000) and public hospital service quality scale (PubHosQual) developed by Aagja and Garg (2010). From the

mentioned instruments, the INSQ scale is identified as a specific instrument for examining nursing service quality. However, the scale was developed according to western context and it was tested by the author among hospitals located in a large western community (Koerner, 2000). Therefore, this scale may not be applicable in its original form to the Asian countries and since review of literature have not found application of the scale in other settings, thus the reliability of the scale is of uncertain. Moreover, the scale was designed for only assessing perception of performance nursing service, therefore it hinders the assessment of expectations from nursing services.

Over the past two decades numerous researchers examined various aspects of service quality and out of these researches SERVQUAL scale had been most commonly used scale for assessing service quality (Rashid & Jusoff, 2009; Ladhari, 2009; Padma et al., 2009). The SERVQUAL scale which was refined in 1988 by Parasuraman, Zeithaml, and Berry included 22 items with five dimensions. The five dimensions are tangible, reliability, responsiveness, assurance and empathy. In the scale each item appears twice as it is separated to “expectation” part and to the “perception of performance” part. Thus, the scale is designed to assess expectation from the service as well as perception of service performance. A gap score for each statement is calculated as “perception of performance score minus expectation score”. Service quality is measured in this scale by calculating the difference between raw “perception of performance” score and the raw “expectation” score. According to Parasuraman et al. (1988), SERVQUAL can be used to assess service quality of each of five service dimensions by averaging difference scores on items making up the dimension. Additionally, SERVQUAL can provide overall measure of service quality

by averaging score across all the five service dimensions. Following these calculations when “perception of performance” is higher than the “expectation”, then SERVQUAL considers good service quality but if reverse occurs it indicates poor quality (Lee & Yom, 2007).

The SERVQUAL scale was assessed for validity & reliability by empirically examining the scale and the result shown the scale as a concise multi-item scale with good reliability and validity (Parasuraman, et al., 1988). The scale had been applied in service sectors in various countries and in studies conducted in health care, in its original form and with modifications (Rashid & Jusoff, 2009; Ladhari, 2009). Reliability of the SERVQUAL has been demonstrated in numerous studies and the Cronbach’s alpha ranged from 0.76 to 0.93 (Huang & Li, 2010), 0.958 to 0.967 (Lin et al., 2009), internal consistency reliability of 0.94 for sample of 422 (Uzun, 2001) and 0.71 to 0.81 (Lim & Tang, 2000). The Korean version of SERVQUAL scale was applied for examining nursing service quality (Lee & Yom, 2007); in the study the reliability of overall scale was Cronbach’s alpha 0.97. Cronbach’s alpha on the five dimensions was 0.85 for tangibility, 0.9 for reliability, 0.87 for responsiveness, 0.91 for assurance and 0.92 for empathy.

Over the years debates about SERVQUAL scale have appeared, such as the use of different scores, the reliability of model, validity, its focus on service process, use of reflective scale and the applicability of the scale in different cultures (Ladhari, 2009). However, authors had listed advantages of SERVQUAL as the scale has standards for assessing dimensions, shown to be valid in various service situations, for its reliability, having limited number of items which makes it easy for consumers and employees to fill the scale quickly and that it has standardized analysis

procedure for interpretation of results (Buttle as cited in Rashid & Jusoff, 2009; Rohini & Mahadevappa as cited in Padma et al., 2009).

Though SERVQUAL was originally developed by Parasuraman et al. (1985) to measure perceived service quality from consumers' comparison of expected service with perceived service, this scale can be utilized for measuring both consumers and service providers perceived service quality. Sergent and Frenkel (2003) described customer contact employees as critical resources for service organizations who take responsibility for delivering customized services. Service quality of an organization is usually perceived by the customers based on their interaction process with customer contact employees (Malhotra & Mukherjee, 2003). Customers view employees as the face of the organization, thus interaction between employees and customers can affect customer to perceive positively or negatively about the service quality, customer loyalty and to the reputation of the organization (Sergent & Frenkel, 2003). In hospital settings, the health care services and its consumers are linked by service providing employees such as doctors, nurses and phlebotomist (Mangold & Babakus, 1991). Therefore, consumer contact employees as nurses are well placed in a position to judge the quality of services that they deliver to patients. Boshoff and Mels (1995) indicated that consumer contact employees are uniquely aware of challenges faced during customer interaction and this makes it crucial to give attention for assessing their perception of service quality.

Moreover, according to Parasuraman et al. (1988) SERVQUAL scale can be appropriately adapted when investigating a single service quality. Therefore, in this study nursing service quality was measured from the perception of nurses and patients

by modifying SERVQUAL scale to make the scale applicable to nursing service context.

Factors Related to Service Quality

Studies have shown that employee related factors along with customer perceived quality factors are related to improve service quality of service providing organizations.

1. *Employee Related Factors*

1.1 *Length of Employment, Experience and Job Characteristics.* Kuo and Ho (2010) examined the effect of three personal factors which are gender, length of employment and experience, on employee perception of job characteristics (JC), flow experience (FE), and service quality (SQ). The result shown that length of employment had significantly positive effect on JC and SQ, employee experience had significantly positive effect on FE and SQ, JC had direct and significant impact of FE and SQ and that FE had direct and significant influence on SQ.

1.2 *Training Programs.* Tsai and Tang (2008) conducted a cross-sectional study to investigate the relationship between nurses' perception of three internal marketing (service training programs, performance incentives and a vision about service excellence) and service quality. Results shown significant positive relationships between internal marketing practices and service quality and among internal marketing practices, training programs had strong association with service quality.

1.3 *Service Climate and effective leadership behavior of supervisors*. Hui, Chiu, Yu, Cheng and Tse (2007) conducted a study to examine the effect of service climate and effective leadership behaviour of supervisors on frontline

employee service quality. In the study service quality was examined from 511 frontline service providers as sampled from 55 work groups in six organizations. The study findings shown that employees' service quality was low when both service climate and supervisors leadership behaviour was lacking. However, when service climate was poor, effective leadership played an important role for maintaining employees' performance standards towards their consumers.

2. *Customer Perceived Factors for Service Quality*

2.1 *Physical facilities and employees professional quality.* A qualitative study conducted in six hospitals located in Bangkok for identifying nursing service quality as expected by patients had shown that patients mostly expected to have calming, peaceful environment with privacy and modern medical equipment. In addition, the study results indicated that patients expected affection and warm welcome from nurses, nurses to have competence in their practice, to provide empathy and care, to provide health teaching, to have one stop service and nurses to comply with nursing ethics (Damapong, 2007).

Moreover, Duggirala, Rajendran and Anantharaman (2008) identified dimensions of patient perceived total quality service in the healthcare sector by performing a thorough review of literature. From the literature review seven dimensions of patient perceived total quality services were identified which are infrastructure, personal quality (doctors care, nursing care, paramedical and support staff quality, quality of communication), process of clinical care, administrative procedures, safety indicators, overall experience of medical care received and social responsibility. After identifying the dimensions they were empirically tested on a

sample of 100 patients of many hospitals across India. Study findings shown that positive and significant relationship among the dimensions and patient satisfaction.

In summary, the studies have addressed employee related factors for service quality improvement and shown customer perceived service quality factors that can facilitate to provide services to meet the needs and expectation of consumers. Therefore, enhancing these factors in service delivery system is important for maintaining quality of service.

Studies Related to Service Quality

In the past years, increased attention had been given for service quality in health care settings. From the literature review, studies had examined service quality of overall hospital services, hospital's outpatient departments' service quality and specific clinical areas service quality and nursing service quality as follows.

In Malaysia, Sohail (2003) conducted a study to measure quality of services provided by private hospitals. To determine patients' expectations and perception of quality of service a modified version of SERVQUAL was used which included five dimensions as in original SERVQUAL but limited number of items to 15 pairs of matching expectation and perception items. The result was based on testing the mean differences between expectation and perception; it indicated that patients' perceived value of the services exceeded expectations for all the dimensions.

In contrast to the study conducted in Malaysian private hospitals (Sohail, 2003), a service quality study conducted in Singapore hospitals shown that there was an overall service quality gap between patients expectation and perception (Lim & Tang, 2000). This study used 22 items in the SERVQUAL scale developed by Parasuraman et al. (1988) with modification to make them more relevant to hospital

services. In addition, the researchers incorporated an additional dimension referred as accessibility and affordability to the scale.

In Chiang Rai province of Thailand, service quality was examined as perceived by clients at different out-patient departments in community hospitals (Saenchatchawan, 2006). In the study, questionnaire and interview methods were used. The researcher applied service quality frame work of Gronroos (2000) as the research conceptual framework. The result showed that service quality as perceived by clients at out-patient department was at high level and the dimension of reliability and trustworthiness had the highest mean score. Study results showed that service quality was significantly different between hospitals with 120 beds 90, 60 and 30 beds. In addition, results indicated that there was no significant difference in the service quality between day shift and evening shift of hospitals with 30, 60, 90 and 120 beds.

A qualitative study was conducted in Jordan, for assessing perception of quality of reproductive health care services provided by Jordanian Ministry of Health community based centres (Al-Qutob & Nasir, 2008). In the study a purposeful national wide sample of 50 primary health care providers participated in a focus group discussion. The focus group participants reported barriers to the provision of high quality services which included issues related to patient overload, patient and physician characteristics and problems related to supervisory and administrative functions.

In 2005, Wisniewski and Wisniewski conducted a study to examine nursing service quality of Scottish colposcopy clinic. In the study nursing service quality of the clinic was assessed from patients' perspective using SERVQUAL with

the five dimensions in which the statements were modified. In the study patients' expectations of the service were obtained on their first attendance at the clinic and on completion of treatment from the clinic patients' perception regarding the service received were obtained. The study result indicated that after comparing perceptions and expectations, there were negative gaps across all five dimensions indicating patients' expectations were not met. Detailed analysis for individual statements making up each dimensions were carried out to identify which statements had main gaps. By identifying the gaps, areas that need improvement and which required prioritization across the five dimensions for improving service quality of the clinic were found (Wisniewski & Wisniewski, 2005).

A study conducted in Korea, compared nursing service quality as perceived by nurses and patients (Lee & Yom, 2007). In this study Korean version of the SERVQUAL scale was used and it integrated five dimensions from the original SERVQUAL which are tangibility, reliability, responsiveness, assurance and empathy. However, the scale utilized 20 statements and they were modified for the use of assessing nursing service quality from patients as well as nurses perspectives and applied five-point Likert scale for scoring. In the study patients and nurses from six hospitals in five provinces in Korea were asked to participate. The responded rate was 95% for patients and 99% for nurses. The study results have shown that nurses perception of expectations and performances were higher than of patients. Additionally, results indicated that nurses' and patients' perception of performances were lower than expectation, resulting poor nursing service quality. The result of the study found dimensions which had the highest mean scores, most important and least

important expectation and performance statements as perceived by nurses and patients.

A study conducted to compare nurses and patients perception of nursing service quality and their satisfaction with nursing services, shown that there was difference between nurses and patients perception of nursing service quality and their satisfaction with nursing services (Kim & Lee, 2004). Additionally, the study result shown that overall patients' perception of nurses' performance was higher than nurses' perception of their performance.

Though several studies were conducted to examine various aspects of health care service quality, few studies have focused on nurses and patients perception of nursing service quality. Therefore, further studies need to be conducted by focusing on nursing service in order to improve and maintain nursing service quality.

Situation of Nursing Service in the Maldives

Nursing Service System in the Maldives

The health system of Maldives is structurally organized into a four-tier system compromising of primary care health centres, secondary care hospitals, tertiary care hospitals and specialized medical clinics (Ministry of Health and Family, 2010). The Indira Gandhi Memorial Hospital (IGMH) functions as a tertiary care hospital. After a recent reorganization of Maldivian health system, IGMH is functioning under Male' Health Services Corporation Limited (Haveeru Online, 2010). However, IGMH still delivers tertiary level care and serves as a referral hospital for the whole country.

Nursing staff provides services in all the four levels of the health system. According to Maldives health statistic data on health professionals' for the year 2007,

showed that in all these levels, a total of 1535 nurses provided nursing services (Ministry of Health and Family, 2009). Among all the nurses in the Maldives, 57.9 % are temporary nurses (expatriate nurses) and 42.1 % are permanent nurses (local nurses). Hence, this indicates that in the Maldivian health care settings temporary nurses are more than permanent nurses. The deputy director of general nursing in the Maldives Nursing Council, Aminath Saeed reported that since opportunities for career progression in nursing are limited in the country and as the profession is not attractive to the younger generations, the number of nurses who joins the profession are relatively low (WHO, 2010). Therefore, as other countries in similar situations, the Maldives is dealing the shortage of nurses by recruiting nurses from other countries (WHO, 2010).

To meet the need for nurses training, the Faculty of Health Sciences (FHS) conducts Bachelor of Nursing (conversion) course, Advanced Diploma in Critical Care Nursing, Diploma in Midwifery, Diploma in Nursing, Diploma in Nursing (conversion) and Advanced Certificate in Nursing courses (FHS, 2008). According to FHS (2010), totally 1300 Maldivians were trained in the field of nursing from 1973 to 2009. The fields in which nurses trainings given were Diploma in Nursing, Auxillary Nurse Midwife, Advanced certificate in Nursing, Diploma in Nursing Conversion, Diploma in Midwifery, Bachelor of Nursing Conversion, Advanced Certificate in Midwifery for Nurse Aides and Advanced Diploma in Critical care Nursing. Though FHS have given major emphasis on trainings of nurses, there is still need to continue that in order to address the issue of shortage of nursing workforce with proper skill mix (WHO, 2007).

One of the key policies in the Health Master Plan (HMP) 2006 – 2015, is to ensure adequate and appropriate human recourses for health service provision and targets and strategic actions have been set to achieve this policy (Ministry of Health, 2006). Strategic actions planned in this policy includes offering continuing education and in service training, workforce planning, development of equitable recruitment strategies, distribution of appropriate skill mix, retention of workers through appropriate incentives and development of standards and protocols for expatriate health workforce recruitment process.

Additionally, another key policy outlined in HMP 2006 – 2015 is to achieve public confidence in the national health system. Targets and strategic actions have been set to achieve this policy goal. To achieve the goal formulated indicators includes, to gain public confidence in health services by 25% from the base line by the year 2010, to achieve 25% proportion of health facilities where clinical services are audited by the year 2010, to establish central level health facilities with total quality management programs by the year 2010, to establish national external quality assurance scheme for health services and to accredit tertiary hospital to ISO standards.

To achieve HMP 2006 - 2015, indicators under the policy of gaining public confidence, the Quality Assurance and Improvement Division of Ministry of Health and Family initiated projects for maintaining standards of the health service facilities which are regulated under the Ministry. According to Director of Quality Assurance and Improvement Division, to maintain standards in the provision of nursing care, nursing care monitoring surveillances were conducted in the regional hospitals, atoll hospitals and in the atoll health centres by external evaluators using Nursing Care Checklist developed by Ministry of Health (T. Usman, personal

communication, May 17, 2010). In the year 2008, six surveillances were conducted in the regional hospitals, atoll (sub-district) hospitals and in the atoll health centres for monitoring nursing care standards (Ministry of Health and Family, 2010).

Nursing Service Situation in Indira Gandhi Memorial Hospital, Maldives

Since IGMH is the main referral hospital in the country it serves as the focal point for serving health care to the people of the Maldives. The IGMH occupies nursing workforce of 549 nurses and they provides services in outpatient departments, in emergency room, in operation theater, in intensive care unit, in reproductive health care clinic, labour room, blood bank and in different inpatient ward areas (IGMH Nursing Department, 2010). The inpatient wards includes; five private wards, five general wards, one isolation ward, one labour induction unit, one general intensive care unit and one neonatal intensive care unit. Total number of 341 nurses works in the inpatient wards of the hospital (IGMH Nursing Department, 2010).

Different categories of nurses provide nursing care to patients ranging from Enrolled Nurse, Registered Nurse, Senior Registered Nurse, and Clinical Nurse (IGMH Nursing Department, 2010). Qualifications required for the categories of nurses includes; Enrolled Nurse need to obtain one year training in basic nursing care, Registered Nurse (RN) need to have education level of diploma in nursing and Senior Registered Nurse need to have diploma in nursing with minimum seven years experience as RN/ minimum 3 years experience as RN with nursing degree/ RN with master degree. Qualification need for Clinical Nurse is diploma in nursing with minimum 10 years experience as RN/ first degree in nursing with minimum 6 yrs experience as a RN/ Master degree in nursing with minimum 2yrs experience as a Senior RN (IGMH Nursing Department, 2010).

The ward areas are managed by Clinical Nurse, Nurse Mangers or Senior Nurse Managers. Nurse Manager's qualifications are diploma in nursing with minimum 12 yrs experience as a RN/ first degree in nursing with minimum 3 years experience as a Clinical Nurse or minimum 6 yrs experience as a Senior RN/ Master degree in nursing with minimum 2 years as a Clinical Nurse or 4yrs experience as a Senior RN. The Senior Nurse Managers qualifications are diploma in nursing with minimum 15 yrs experience as RN/ degree in nursing with 12 yrs experience as a RN/ Master degree in nursing with 8 yrs experience as a RN/ specialization as a Nurse Practitioner/ PhD in nursing with RN (IGMH Nursing Department, 2010). In all the inpatient wards/units both permanent and temporary nurses provide services.

Overall planning, organization and management of nursing services are carried out in the Nursing Department of IGMH (IGMH Nursing Department, 2010). The Nursing Department establishes policies for the nurses to abide, provides practical guidelines and on continuous basis supervises nurses work environment and the staff performances. The Director of Nursing is the head of IGMH Nursing Department. Followed by the Director of Nursing, three Deputy Directors of Nursing monitors overall nursing functions of the hospital. Under the three Deputy Directors of Nursing there are 22 wards managed by 20 Senior Nurse Managers/Nurse Managers/Clinical nurse (IGMH Nursing Department, 2010). In the ward levels, Senior Nurse Managers/Nurse Managers/Clinical nurses are in the highest position and takes responsibility for managing patient care, managing ward staff and for managing the ward environment. Along with these responsibilities Senior Nurse Managers conducts supervision duties for managing and solving issues related nursing

services in the hospital. In all the wards, for each shift, shift in-charge nurses are assigned to monitor overall nursing care in the wards.

In the IGMH workforce 41% are nursing staff and among the nurses 44% nurses are permanent staff and 56% nurses are temporary staff. All the nurses in the hospital work in three shifts per day with two days off duties in a week (IGMH Nursing Department, 2010). In the general wards the standard for nurse to patient ratio is one nurse to six patients and in the private wards nurse to patient ratio is one nurse to three patients. The ratio of nurse to patient increases during shortage of nurses and when patient acuity is high and as the amount of permanent nurses are less in the hospital, it leads for lower number of permanent nurses per shift and this hinders patient-nurse communication as all temporary nurses are from other countries. According to Ministry of Health and Family (2009) most of the expatriate staff working in health sector of the Maldives experiences cultural and language problems which leads to barrier in communication between patients and healthcare professionals.

To standardize nursing practices and to maintain consistency of nursing performances in the IGMH, procedure manuals as “Fundamental Nursing Procedures”, “Clinical nursing Procedures”, “Infection Control Practice” and “Standards for Nursing Practice” were developed in 2007 by IGMH Nursing Department and nursing staff of IGMH. The aim of these manuals were to support junior nurses and nursing students in provision of nursing care, to provide safe and comprehensive nursing care to patients and their families, to standardize nursing in the Maldives and to facilitate for achieving excellence in the quality of nursing care

(Firaq, 2007). The staff compliance to the procedures are monitored by Senior Nurse Managers, Nurse Managers or by Clinical Nurses.

Moreover, new nurses who join IGMH are assigned to preceptors to assess and improve their knowledge and competency in providing nursing care. For this purpose IGMH Nursing Department developed assessment tool for monitoring new nurses. The assessment tool has components as knowledge of procedures, competency in performing procedures, knowledge of medications, competency in administering medication, knowledge of condition of patients, competency in managing patients, organization and management of work (IGMH Nursing Department, 2007). Using this tool staff problem solving and decision making skill can be assessed, staff teaching skill and participation in in-service education can be assessed along with assessment of attendance, appearance and attitude. The assessment tool is designed in a way to monitor staff weekly for twelve weeks followed by monthly till one year. All nursing staff are required to follow rules and regulations established from Nursing Department, which states about staff appearance in uniform, attendance, maintaining patients confidentiality, being courteous to patients, their relatives, colleagues and visitors of the hospital (IGMH Nursing Department, 2009).

To improve IGMH service quality according to consumer needs and to provide consumer centered care, the IGMH management implemented consumer feedback system in the year 2009. To obtain consumer feedback a total of 15 suggestion boxes with attached suggestion forms were set up in outpatient service areas, in inpatient wards and in emergency service area (R. Hassan, personal communication, May 13, 2010). The consumer feedback data are reviewed on weekly basis by IGMH Customer Relation Department staff. The analysis of data from five

months (December 2009 to April 2010) customer feedback forms has shown that among 1950 consumers who gave feedback about nursing services, 56% stated that the service is very poor, 20% stated they received neither good service nor poor service, 13% stated that the service is good and only 11% stated that they received excellent service (IGMH Customer Relation Department, 2010). These feedback results indicated that consumers desired to receive quality nursing services from IGMH.

As IGMH being most demanding health service organization in the country it is important to examine the nursing service quality rendered from this hospital. Based on nursing situation in IGMH and literature findings this study explored perceived nursing service quality from patients as well as nurses perspectives.

Conceptual Framework

The conceptual framework for this study was derived from perceived service quality gap of service quality model developed by Parasuraman et al. (1985). Nursing service quality was defined as the result of difference between expected nursing service quality and performance of nursing service quality as perceived by nurses and patients in five dimensions including tangibility, reliability, responsiveness, assurance and empathy. Comparing nursing service quality as perceived by nurses and patients can facilitate to identify whether both nurses and patients perception are congruent if not need to identify inconsistencies to close the gap of perception for improving nursing service quality.