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Research Article

Total Quality Management of Three Upazila Health Compelxes

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Abstract

Background: Total Quality Management (TQM) is a structured approach to overall organizational management. The focus of the process is to improve the quality of organizations outputs, including goods and services, through continual improvement of internal practices. The aim of this study was to assess the total quality management of three Upazila Health Complexes (UHCs) among the service providers and the service receiver.

Methods: A descriptive survey study design was use among 204 respondents (127 from service provider & 77 from service receiver) from the three UHCs. Purposive sampling method was applied to collect data by using a semi-structured questionnaire. Data were collected through face-to-face interview and observational checklist. Data was analysed by using descriptive statistics included mean, median, mode, standard deviation, frequency and percentage.

Results: Mean Age of the respondents was 42.57 (SD+7.736) years. Most of (96%) the respondents had training on TQM in three Upazila health complexes. Though all of the respondents mentioned that Upazila health complexes were overloaded among them 74% expressed they were satisfied working at Upazila hospital. Chougacha Upazila Health Complex and Doudkandi Upazila Health Complex all respondents were attended 5S-CQI-TQM refresher training by the local authority and the authority of Harirampur Upazila Health Complex did not arrange such refresher training. Most of the service receiver was partially satisfied of the services of Upazila Health Complexes.

Conclusion: TQM in government health care service of Bangladesh is a new initiative in the Upazila health complex and the service providers are happy to work under TQM. But still it is needed enough time and steps for implementation of TQM in UHCs. TQM approach should be gradually integrated into the healthcare delivery system. There is a need for repeated refresher training, supervision and monitoring, initiative for reward to established TQM in UHCs within the existing facilities.

Keywords: Total Quality Management; Upazila Health Complexes; Refresher training

Introduction

Total Quality Management (TQM) is management philosophy embracing all activities through which the needs and expectations of the customer and community accomplished the objectives of the organization are satisfied in the most efficient and cost-effective manner by maximizing the potential benefit of all employees in a continuing drive for improvement [1]. Health Care Systems throughout the world are undergoing significant changes. These changes are due to acknowledgment of either medical errors or system errors. Other factors responsible for these changes include: Legal obligation for quality management in some countries such as Germany assessment of service quality provision, the sophistication of medical care and increasing costs of health care [2]. As a consequence, the quality of care and quality of service provided to patients have become a first priority in various nations [3]. TQM is a process which embraces the conscious striving for zero defects in all aspects of an organization's activities or management with workforce co-operating in the processes, developing, producing and marketing quality goods and services which satisfy customers' needs and expectations first time and every subsequent time [4]. Technological advances, including revolution in information technology worldwide has led to increased demand and new expectation of patients. The quality of service is an important determinant of population health and in this respect Bangladesh is lagging far behind. Though health is regarded as a fundamental human right, uniform dispensation of health service facilities to the entire population has not yet

been observed in Bangladesh [5]. The quality of service is an important determinant of population health and in this respect Bangladesh is lagging far behind. Though health is regarded as a fundamental human right, uniform dispensation of health service facilities to the entire population has not yet been observed in Bangladesh [6].

TQM is based on continuous quality improvement (CQI), customer focus, and teamwork. Continuous quality improvement is a concept based on a Japanese philosophy of "Kaizen," which is based on continually seeking improvement on a process or system. The underlying belief on continuous improvement is that any aspect of a process or system can be improved [1]. The present health policy is mainly emphasizing the construction of Thana Health Complexes (THCs) and Union Health and Family Welfare Centers (UHFWCs) giving much attention to their utilization and delivery services. The study reveals that financial and technical support is very helpful to ensure health service among village people. However, the Government allocates only 5 percent of the budget to the health sector, while it allocates 13 percent for defense. The paper shows that the Government's allocation and technical support are not sufficient in the rural health complex and that the people's participation is far from being satisfactory [7]. Health care delivery is a complicated process which involves large numbers of workers, Leadership knowledge management, training, supplier quality management, customer focus, strategic quality planning, continuous improvement, employee involvement, and process management as the factors of TQM practices (8. Hasegawa T, JICA, 2006).

The main problem in hospital management is resources constraints in Bangladesh. Usually, the problems found in hospital management is lacking of leadership and positive attitude towards clients. Require to change the mentality and optimum use of existing resources. 5S-KAIZEN (Continuous Quality Improvement), TQM is the recent initiative of the hospital management unit of DGHS under the MOH&FW of Bangladesh. 5S-CQI-TQM is implementing in some district hospitals and gradually applying in the selected health complexes under CDC of DGHS, and with the help of JICA and WHO. To implement TQM effectively need to have patience because TQM takes a long time to get implemented and to have fruitful results. It requires major changes in cultural aspects as well as employee mindset in an organization. Further, the outcomes of previous studies suggest that TQM is widely applied in the service sector and responsible for improved economy. Its implementation is associated with greater customer satisfaction and more [9]. TQM is the integration of a customer-focused, continuous improvement philosophy, analytical skills, people skills and a structure and organization, within an internal and external culture affected by leadership. However, the uniqueness and power of TQM is in the integration and balance of the above principles, not in the use of individual principle. The key to organizational goal achievement is people, especially in a labour-intensive hospital environment. Inattention to people and cultural change are the most common reasons for failure in [10].

That the Government's allocation and technical support are not sufficient in the rural health complex and that the people's participation is far from being satisfactory [7]. Bangladesh is one of the poorest countries in the world. Its annual budget is very much limited in all sectors. Budgetary allocation in health sector per annum is not much enough to meet the demand of the country's enormous population. As budget is poor, there is limitation in other resources also, but we have a very good infrastructure especially at the field level manpower in health care.

Previous studies have found that customer focus positively affects operational, innovation, inventory, employee management performance, customer satisfaction/results, sales, and aggregate organization performance. In order to assure good quality care, we need to know something about changing or modifying the behaviors and the organizations in which they practice. And organizational change creates strain and tension; it raises conflict between the norms of professional freedom and bureaucratic autonomy. The people often blame hospital managers for poor quality health care services, especially in the rural government hospitals. It is important to find out the perception of service providers themselves, who are directly rendering services. As we face the new millennium with its challenges, this study will help to determine the level of TQM adoption in Bangladesh and most organizations may need to do in order to be ready. The study will indicate if there are things that are being done wrongly and to help the policy makers to take the correct steps. There is a continuous increase in the level of importation of goods and services into the Upazila hospitals of our country because of the belief that they are of higher quality. As we face the new millennium with its challenges, this study will help to determine the level of TQM adoption in Bangladesh and most organizations may need to do in order to be ready. The study will indicate if there are things that are being done wrongly and to take the corrective steps. TQM and provide guidelines for achieving the full potential of TQM in public health organizations. The guidelines include redefining the role of management, defining a common corporate culture, refining the role of citizen oversight functions, and setting realistic estimates of the time needed to complete a task or project [11].

Total quality management (TQM) has a great potential to address quality problems in a wide range of industries and improve the organizational performance. The growing need to take initiatives by hospitals in countries like India and Iran others developed and developing country to improve the service quality inspired the authors to develop a survey instrument to measure health care quality and performance in the two countries [12]

Methods

A descriptive survey study design was used to assess the total quality management of three Upazila Health Complexes among the service providers and the service receiver. The approval was obtained from the institutional review board NIPSOM and Sheikh Mujib Medical University, Dhaka Bangladesh and from Upazila Health and Family Planning Officer (UH & FPO) of Chougacha Upazila Health Complex, Doudkandi Upazila Health Complex and Harirampur Upazila Health Complex. The data were collected in between January to December 2015. The purposive sampling technique was used to recruit the participants. After approval from the target setting, met with the UH & FPO to explain the study objectives and data collection procedure. Potential participants were explained about details of the study and were informed that they had the right to withdraw from the study any time without any harm. Participants who decided to participate in the study were asked to sign the

Table 1: Socio demographic characteristics of respondents (service provider and service receivers) n=204.

Variables	Service Provider n (%)	Service Receiver n (%)
Age in Years	42.57 ±7.74	29.23 ± 7.85).
Gender		
Female	54(42.5)	18(23.4
Male	73(57.5)	59(76.6)
Education		
MPH	2(1.6)	
MBBS	31(24.4)	
Diploma in Nursing & Midwifery	41(32.3)	
Diploma in Medical Assistant (Faculty)	11(8.6)	
BA	5(3.9)	
HSC	14(11)	
Class VIII	23(18.2)	
Educational Qualification of the service receiver		
Illiterate	15(19.5)	
Primary	31(40.3)	
JSC	13(16.9)	
SSC	10(13.0)	
HSC	8(10.4)	
Monthly Income	27186.46±8968.58	9929.87± 4652.30
Designation of the service provider		
Doctor	32(25.2)	
Sub Assistant Community Medical Officer	11(8.7)	
Nursing	41(32.3)	
Medical Technologists	14(11.1)	
Statistician	3(2.40)	
Tuberculosis Leprocy Control Assistant	3(2.4)	
Supporting Staff	23(18.3)	
Service length of service provider		
>20 Years	9(7.20	
16-20 Years	10(7.9)	
11-15 Years	17(13.4)	
6-10 Years	32(25.20	
1-5 Years	59(46.5)	
Occupation of the service receiver		
Student		7(9.1)
Service		15(19.5)
Daily labour		1(1.3)
Housewife		44(57.1)
Farmer		4(5.2)
Unemployed		69(7.8)

consent form. Total of 204 participantswere selected based on the following inclusion criteria; Respondent who were agreed willingly to participate and who were available during data collection period.

Face to face interview was performed to seek opinion of the selected respondents about the different services provided at different units/departments of Upazila health complex. The observation was done by using a checklist through which data were collected, while the doctors, nursing staffs and other personnel were dealing with the service recipients as well. To assess the level of satisfaction of the service receiver at selected point of service delivery, there were number of pertinent questions. There was more than one question in assessing respondents' level of satisfaction, The level of satisfaction were measured on a 1-5 Likert Scale, where meaning of 1 is 'very satisfied' 2 is 'partially satisfied', 3 is 'Neither satisfied' nor 'dissatisfied' and 4 is 'partially dissatisfied' and 5 means very dissatisfied.

Results

Table 1 show that the mean ages of the service providers were 42.57+7.74 years and service receivers 29.23+7.85 years. More than half of the service provider (57.5%) was male and most of the service receiver (76.6%) were female. The educational background of the service providers' professional education, were Diploma in nursing, MBBS, diploma in medical assistant, and MPH were 32.3%, 24.4%, 8.6% and 1.6% respectively. General education such as BA, HSC, and class VIII were 3.9%, 11%, and 18.2% respectively. Most of the service receiver (40.3%) studied up to primary school. Most (57.1%) of the service receiver were housewife. The average income of service provider and service receiver were 27186.46+8968.58 taka and 9929.87+4652.30 taka respectively. Mostly (32.3%) of the service provider designation was nursing; doctor 25.2%; supporting staff 18.35; and others like Sub Assistant Community Medical Officer, Medical Technologists, Statistician, Tuberculosis Leprocy Control Assistant were 8.7%, 11.1%, 2.4% and 2.4% respectively. The most (57.1%) of service receiver were housewife then the next larger group 19.5% were service holder. Majority of the (46.5%) respondents' service length was within 1 to 5 years.

The table shows that service provider opinion on the TQM. All the respondents mentioned that UHC was overloaded. Most of the respondents 74.8% were satisfied to working at Upazila hospital. All of the respondents of Chougacha Upazila Health Complex (CUHC) and Doudkandi Upazila Health Complex (DUHC) attended 5S-CQI-TQM refresher training programme and except the respondents of Harirampur Upazila Health Complex (HUHC). Most of the respondents know the meaning of

Table 2: Distribution of Information related to Total Quality Management n=127.

Variables		N (%)	M (SD)
Opinion of respondent on patient care			
Upazila health complex was overloaded		127(100)	
Feelings regarding working at Upazila Hospital			
Highly satisfied		23(17.3)	
Satisfied		95(74.8)	
Poorly satisfied		10(7.9)	
Participate 5S-CQI-TQM refresher training			
CUHC	Yes	48(100)	
DUHC	Yes	35(92.1)	
	No	3(7.9)	
HUHC	No	41(100)	
Responses by meaning of 5S			
Chougacha Upazila Health Complex (CUHC)	Know	41(85.4)	
	Partially know	3(6.3)	
	Don't know	4(8.3)	
Doudkandi Upazila Health Complex	Know	29 (76.3)	
(DUHC)	Partially know	6(15.8)	
	Don't know	3(7.9)	
Harirampur Upazila Health Complex	Know	16(39)	
(HUHC)	Partially know	3(7.3)	
	Don't know	22(53.7)	
Practice of 5S-CQI-TQM	Yes	74(58.3)	
	No	53(41.7)	
Have QIT or WIT in the hospital	Yes	125(98.4)	
QIT or WIT visit activities of hospital staffs	Once daily	122(96)	
Employees treat each other with respect	Strongly agree	81(63.8)	
	Agree	46(36.2)	
Important patient care information is often lost during shift changes	Strongly disagree	79(62.2)	
	Disagree	42(33.1)	
	Neither	2(1.6)	
	Agree	4(3.2)	
Hospital units work well together to provide the best care for patients	Neither	2(1.6)	
	Agree	45(35.4)	
	Strongly agree	80(63.0)	
Hospital authority seriously considers staff suggestions for improving service quality	Neither	16(12.6)	
	Agree	101(79.5)	
	Strongly agree	10(7.9)	
Authority recognizes and rewarded the best performer of the hospital	Strongly disagree	18(14.2)	
	Disagree	15(11.8)	
	Neither	87(68.5)	
	Agree	7(5.5)	
UTILITY SERVICES AVAILABLE IN UPAZILA HEALTH COMPLEXES			
Dietary services, Laundry & linen, housekeeping, communication, transportation, public relation and security services		127(100)	
Support services available in Upazila health complexs, such as Clinical laboratory, Radiology and imaging, store and pharmacy, sterile supply services, medical records			
CUHC		48(100)	
DUHC		38(100)	
HUHC		41(96)	
The problem in management of patients in Upazila hospital			
Manpower, medicine, modern instrument, pathological test item shortage.		71(55.9)	
Manpower and medicine shortage		25(19.7)	
Manpower shortage		22(17.3)	
Medicine shortage		9(7.1)	
Community contribution on improve quality care in the hospital			
CUHC			
	Highly contribution with manpower support, IPS, new instrument purchase, financial support to the poor patient	48(100)	
DUHC			

	Have contribution that the chairman build a delivery room with a few modern facilities and IPS	38(100)	
HUHC			
	No community contribution	41(100)	
Use any checklist or assignment for their daily activities			
Yes		30(23.5)	
No		97(76.5)	
Recommendation by the respondents for further improvement of hospital management			
Increase beds, manpower, adequate medicine, modern facilities, arrange foreign training, waiting space, reward		64(50.4)	
Fillip and Increase manpower, adequate medicine, modern facilities, arrange foreign training, waiting space		53(41.7)	
Adequate quantity of medicine and equipment's and waiting room for male and female		10(7.9)	

5S at CUHC and DUCH that is 85.4% and 76.3% and most of the respondents in HUHC 53.7% did not know the meaning of 5S. More than half 58.3% of the respondents were practice 5S-CQI-TQM. All most all the respondent 98.4% mentioned that they have Quality improved team. All most (96%) the entire respondent said that the Work Improvement Team (WIT) and Quality Improvement Team (QIT) team visited their unit activities. Most (63.8%) of the respondent were strongly agree and 36.2% were agree regarding employee's respect among each other. Most (62.2%) of respondents were strongly disagreed and 33.1% respondent were disagreed that important patient care information is lost during service providers' shift change. The majority 63% of the respondents were strongly agree that hospital units work well together to provide the best care for patients. Nearly eighty percent of the respondents agree that hospital authority seriously considers staff suggestions for improving service quality. Among the statement of authority recognizes and gave reward for the best performance most 68.5% of the respondents did not mention anything, only 5.5% agree with this statement. All of the respondents answered that the UHCs have the available utility services facilities.

The HUHC had no radiology and imaging service available but CUHC and DUHC had radiology and imaging services including Clinical laboratory, store and pharmacy, sterile supply services, medical records etc supportive service facilities. All the respondents 55.9% (71) stated manpower, medicine, modern instrument, pathological test item shortage, 19.7% (25) stated manpower and medicine shortage, 17.3% (22) and 7.1% (9) respondent revealed manpower and medicine shortage are the problem in management of patients in Upazila hospitals. All the respondents of CUHC and DUHC mentioned the contribution of local community people and respondents of HUHC mentioned still no contribution of community people in improving the health care services in their hospital. Most (76.5%) of the respondents did not use any checklist or assignment for their daily activities and 23.5% respondents used checklist to complete their activities. Majority 50.4% (64) of the respondents recommended to Increase beds, manpower, adequate medicine, modern facilities, arrange foreign training, waiting space, reward 41.7% (53) recommended to fill up and Increase manpower, adequate medicine, modern facilities, arrange foreign training, waiting space and rest 7.9% (10) of all recommended for adequate quantity of medicine and equipment'sand waiting room for male and female.

The table shows that 53.2% service receiver were partially satisfied on the availability and communication of the service provider. Satisfaction regarding Reception, Enquiry, Emergency, Outdoor and Indoor services and Availability of free treatment and Poster with health message hanging on the hospital wall were partially satisfied 84.5% and 77.9% respondent respectively. Service receiversatisfaction on service provided on the basis priority and fast, among all 53.2% were partially satisfied, 27.3% were very satisfied and 19.5% were neither satisfied nor dissatisfied. Service receiver satisfaction on Co-operative behaviour of the service provider, among all 50.6% was partially satisfied, 36.4% were neither satisfied nor dissatisfied and 13% were very satisfied. To solve emergency problem, physician is available on mobile phone always, among all 77.9% were partially satisfied, 16.9% were very satisfied and 5.2% were neither satisfied nor dissatisfied.

Patients' satisfaction on Supply and availability of medicine and other product, among all the respondents' 54.5% were neither satisfied nor dissatisfied, 19.5% were partially dissatisfied, 15.6% were partially satisfied 5.2% were very dissatisfied and 5.2% were satisfied. Seventy-four percent of the service receiverwas partially satisfy on hospital management strategy. Satisfaction on other services of the hospital, among all 79.2% were partially satisfied, 11.7% were neither satisfied nor dissatisfied, 5.2% very satisfied and only 3.9% were partially dissatisfied. Above eighty percent service receiver was partially satisfied on awareness raising education about services of the hospital and contribution of the community people. Satisfaction on diet distribution in the hospital in proper manner, among all 72.7% was very satisfied and 23.4% were neither satisfied nor dissatisfied rest of all were partially dissatisfied. More than fifty percent of theservice receiver was partially satisfied on Care of the patient by the service provider. Patients' satisfaction on timing of the service provider, among all the respondents 66.2% were partially satisfied, 16.9% were very satisfied and another 16.9% neither satisfied nor dissatisfied. Patients' satisfaction on Gentle and Politeness of the service provider, among all the respondents 57.1% were partially satisfied, 35.1% were neither satisfied nor dissatisfied and 7.8% were very satisfied. Most 80.5% respondent was partially satisfied on working skill of the provider. service receiversatisfaction on the treatment given by the physician among all the respondents 45.5% was neither satisfied nor dissatisfied.

Service receiver satisfaction on Toilet cleanliness, 63.6% was partially satisfied 27.35 neither satisfied nor dissatisfied. Service receiversatisfaction on Bathroom cleanliness, among all the respondents, 74% were partially satisfied, 19.5% were neither satisfied nor dissatisfied and only 6.5% were partially dis-

Table 3: The level of satisfaction among service recevier's on availability of services and supplies (N= 77).

Variables	Very satisfied n (%)	Partially satisfied n(%)	Neither satisfied nor dissatisfied n(%)	Partially dissatisfied n(%)	Very dissatisfied n (%)
1. Availability of service provider and communication	20(26)	41(53.2)	16 (20.8)		
2. Reception, Enquiry, Emergency, Outdoor and Indoor seen easily	12(15.6)	65(84.4)			
3. Availability of free treatment and Poster with health message hanging on the hospital wall	14(18.2)	60(77.9)	03(3.9)		
4. Service provided on the basis priority and fast	21(27.3)	41(53.2)	15(19.5)		
5. Co-operative behaviour of the service provider	10(13.0)	39(50.6)	28(36.4)		
6. To solve emergency problem, physician is available on mobile phone.	13(16.9)	60(77.9)	4(5.2)		
7. Supply and availability of medicine and other product	4(5.2)	12(15.6)	42 (54.5)	15(19.5)	4(5.2)
8. Priority given on Patient's satisfaction in hospital management strategy	20(26.0)	57(74.0)			
9. Satisfaction on other services of the hospital	4(5.2)	61(79.2)	9(3.9)	03(3.9)	
10. Awareness raising education about services of the hospital and contribution of the community people	06(7.8)	63(81.8)	08(10.4)		
11. Diet distribution of the hospital in proper manner	56(72.7)	18(23.4)	3(3.9)		
12. Care of the patient by the service provider	14(18.2)	41(53.2)	22(28.6)		
13: Patient's satisfaction on timing of the service provider	13(16.9)	51(66.2)	13(16.9)		
14. Gentle and Politeness of the service provider	6((7.8)	4(57.1)	27(35.1)		
15. Working skill	12(15.6)	62(80.5)	3(3.9)		
16. The treatment given by the physician	11(14.3)	31(40.3)	35(45.5)		
17. Toilet cleanliness	2(2.6)	49(63.6)	21(27.3)	5(6.5)	
18. Bathroom cleanliness		57(74)	15(19.5)	5(6.5)	
19. Service provided on the basis priority and fast	21(27.3)	41(53.2)	15(19.5)		

satisfied. Patients' satisfaction on service provided on the basis priority and fast and among all the respondents 53.2% were partially satisfied 27.35 were very satisfied and 19.5% were neither satisfied nor dissatisfied.

Discussion

This study finding revealed that the mean age of the service providers and service receivers were 42.57 +7.74 and 29.23 + 7.85 years. A similar study conducted by Mst. Joynab Siddiqua and Md. Ariful Haque Chudhury on Service Quality: An Empirial study of Private Hopitals in Dhaka city in 2014. Majority (56.36%) of the respondents were in the age group of 20-30 years. Majority of the age group were not consistent between two studies but both the studies conducted in Bangladesh. These percentages were too much higher than in contrast with the previous study conducted [9]. Among therespondents 57.5%of the male were service providers and 76.6% service receivers were female. The previous study was not similar with present study.In the present study revealed that the educational background of the service providers, 1.6% had MPH degree and 24.7% had MBBS degree and 32.3% had Diploma in Nursing degree; 8.6% had Diploma in Medical Assistant degree. The previous study was not similar with the present study educational background (Siddiqua MJ and Haque Chudhury MAH, 2014). Most (40.3%) of the service receivers studied up to primary school. Present study monthly family income of the service provider was 27186.46 (SD+896.858) and service receivers was 9929.87+4652.30 Taka. These percentages were much higher than in contrast with the previous study conducted (9. Siddiqua MJ and Haque Choudhury MAH, 2014). Among the service provider 25.2% doctor, 32.3% nurses, 8.7% Sub Assistant Community Medical Officer, 11.1% Medical Technologists, 18.3% Supporting Staff, and so on. Among the service receivers 57.1% were housewife, 19.5% were service holder.

Most (46.5%) of the respondents' length of service was within 1 to 5 years, the next majority 25.2% of respondents' service length was within 6 to 10. Islam F et al conducted a similar study on perceptions of health care providers and patients on quality of care in maternal and neonatal health in fourteen Bangladesh government healthcare facilities: a mixed-method study in 2015. Lenth of service nearly similar and both was conducted in Bangladesh (10. Islam F et al, 2015).

The present study result showed that opinion on the quality of management of clinical and nursing services among the service provider. All (100%) the respondents mentioned that Upazila health complexes were overloaded. Among them 74% expressed that they were satisfied, 17.3% were highly satisfied, and 7.9% were poorly satisfied working at Upazila hospital. On the other hand, this was consistent with the previous similar study conducted by Mst. Joynab Siddiqua and Md. Ariful Haque Choudhury on Service Quality: An Empirical study of Private Hospitals in Dhaka city in 2014.

The result shows that all most all the respondent get 5S-CQI-

TQM refresher training among the respondents of Chougacha Upazila Health Complex and Doudkandi Upazila Health Complex and all the respondents of Harirampur Upazila Health Complex did not attend. On the other hand, motivational programme manager for the hospital staff (3. Adeoti JO, 2011). It was observed that the respondents in CUHC 85.4% knew the meaning of 5S, DUHC 76.3% knew the meaning of 5S, and HUHC 39% knew the meaning of 5S. The previous study conducted by Hasegawa T & Karandagoda W (2013) on 5S -KAIZEN- TQM Change Management for Hospitals. These two studies result also nearly same. About the practice of 5S-CQI-TQM58.3% practice 5S-CQI-TQM and 41.7% (53) mentioned that they did not practice 5S-CQI-TQM. These findings were not consistent with the previous study (10. Hasegawa T & Karandagoda W, 2013). Most of 98.4%the respondent mentioned that they have Quality improved team or work improvement team. On the other hand, these percentages were not consistent with the previous study (3. Adeoti JO, 2011).

Ninety-six percent of the respondent express that WIT and QIT team visited their unit activities once daily. Most (63.8%) of the respondents were strongly agree and 36.2% were agree regarding employees respect among each other. Most (62.2%) of the respondents were strongly disagree, 33.1% were disagree, 2% were neither and only 3% were agree that important patient care information is often lost during service providers' shift change.about the statement hospital units work well together to provide the best care for patients 63% respondentswere strongly agree,35.4% were agree but only 1.6% were neutral. Hospital authority seriously considers staff suggestions for improving service quality 79.5% respondents were agreed, 12.6%were neither and 7.9% were strongly agree with the statement. In previous study was similar with present study (3.Adeoti JO, 2011).Authority recognizes and gave reward for the best performance68.5% the respondents did notmention anything and 14.2% (18) were strongly disagree also 11.8% were disagree only 5.5% were agree. Thestudy revealed that the problem in management of patients in Upazila hospital55.9% stated manpower, medicine, modern instrument, pathological test item shortage, 19.7% stated manpower and medicine shortage, 17.3% and 7.1% stated manpower and medicine shortage. Islam F et al conducted a similar study on perceptions of health care providers and patients on quality of care in maternal and neonatal health in fourteen Bangladesh government healthcare facilities: a mixed-method study in 2015.

Findings regarding the quality management of utility services & supporting services

The previous study conducted on Total Quality Management (TQM) Factors: An Empirical Study of Kwara State Government Hospitals by Adeoti JO, 2011. These percentages were lower than in contrast with the present study. In present study revealed that the HUHC had no radiology and imaging service available but CHUC and DUHC had radiology and imaging services including Clinical laboratory, store and pharmacy, sterile supply services, medical records etc supportive service facilities [3].

In the present study all the respondents of CUHC and DUHC mentioned the contribution of local community people and respondents of HUHC mentioned still no contribution of community people in improving the health care services in their hospital. It was observed in present study that most (76%) of the respondents did not use any checklist or assignment for their daily activities and 24% respondents used checklist to complete their activities. In the present study that majority 50.4% (64) of the respondents recommended to Increase beds, manpower, adequate medicine, modern facilities, arrange foreign training, waiting space, reward 41.7% (53) recommended to fill up and Increase manpower, adequate medicine, modern facilities, arrange foreign training, waiting space and rest 7.9% (10) of all recommended for adequate quantity of medicine and equipment'sand waiting room for male and female

Findings related to satisfaction of the patients

Patient satisfaction is an important parameter for assessing the quality of patient care services. The level of patient's satisfaction on availability of service provider and their communication with the patient, findings showed among all 53.2% were partially satisfied, 26% were very satisfied and rest of all neither satisfied nor dissatisfied. The level of patient's satisfaction on Reception, Enquiry, Emergency, Outdoor and Indoor seen easily, 84.4% were partially satisfied, 15.6% were very satisfied. Regarding patients' satisfaction on availability of free treatment and Poster with health message hanging on the hospital wall, among all 77.9% were partially satisfied, 18.2% were very satisfied and 3.9% wereNeither satisfied nor dissatisfied. Patients' satisfaction on Service provided on the basis priority and fast, among all 53.3% were partially satisfied, 27.3% were very satisfied and 19.5% were neither satisfied nor dissatisfied. Patients' satisfaction on Co-operation of the service provider, among all 50.6% were partially satisfied, 36.4% were neither satisfied nor dissatisfied and 13% were very satisfied.Patients' satisfaction on to solve emergency problem, Physician is available on mobile phone always, among all 77.9% were partially satisfied, 16.9% were very satisfied and 5.2% were neither satisfied nor dissatisfied.

The findings regarding patients' satisfaction on Supply and availability of medicine and other product, among all the respondents' 54.5% were neither satisfied nor dissatisfied, 19.5% were partially dissatisfied, 15.6%% were partially satisfied 5.2% were very dissatisfied and also 5.2% were very satisfied. The level of patient's satisfactionon other services of the hospitalamong all 79.2% were partially satisfied, 11.7% were neither satisfied nor dissatisfied, 5.2% very satisfied and only 3.9% were partially dissatisfied.Patients' satisfaction on awareness raising education about services of the hospital and contribution of the community people 81.8% were partially satisfied, 10.4% were neither satisfied nor dissatisfied and only 7.8% were very satisfied Patients' satisfaction on Diet distribution in the hospital in proper manner, among all 72.7% were partially satisfied and 23.4% were neither satisfied nor dissatisfied rest of all were partially dissatisfied. Patients' satisfaction on Care of the patient by the service provider among all the respondents 53.2% were partially satisfied, 28.6% were neither satisfied nor dissatisfied and 18.2% were very satisfied. Patients' satisfaction on timing of the service provider, among all the respondents 66.2% were partially satisfied, 16.9% were very satisfied and another 16.9% neither satisfied nor dissatisfied. Patients' satisfaction on Gentle and Politeness of the service provider, among all the respondents 57.1% were partially satisfied, 35.1% were neither satisfied nor dissatisfied and 7.8% were very satisfied.

Patients' satisfaction on working skill, among all the respondents, 80.5% were partially satisfied, 15.6% were very satisfied and 3.9% were neither satisfied nor dissatisfied. Patients'

satisfaction on the treatment given by the physician among all the respondents 45.5% were neither satisfied nor dissatisfied, 40.3% were partially satisfied and 14.3% were very satisfied. Patients' satisfaction on Bathroom cleanliness, among all the respondents, 74% were partially satisfied, 19.5% were neither satisfied nor dissatisfied and only 6.5% were partially dissatisfied. Patients' satisfaction on service provided on the basis priority and fast and among all the respondents 53.2% were partially satisfied 27.35 were very satisfied and 19.5% were neither satisfied nor dissatisfied.

Conclusion

For total quality to be implemented, one strategy is to have the leaders of the organization steer the workforce in the right direction. In this author's introductory paragraph, it was emphasized that some of the reasons for failure of continuous quality improvement can be traced to the insufficient support of health professionals, the lack of leadership commitment and the tendency to look at TQM in isolation rather than putting it at core of the institution's strategy. Moreover, there exist various powerful subcultures (e.g. manager's subculture, physician's subculture, etc), each one of whom has their own perspective of what quality should be and how the work should be done. Leaders of an organization have a major role in the development of an organizational culture that is supportive of organizational improvement. The leader of the organization must foster total employee involvement in the quest for excellent service quality. Hospital Care service in the selected Upazila health complexes gradually moving from service to quality standardization to extend to total quality where there is a better interaction involving in the service provider, authority and supporting staffs in the UHC and make teamwork and community people involvement though one of them are still behind from another hospital. The findings of this study needed importance for health policy makers in Bangladesh with respect to the non-clinical and clinical aspects of service quality.

Recommendations

As resources are limited there is need for efficient management of health services system for quality care of the patient which will help the authority in identifying the problems and efficient management for quality care. To brief the service provider about TQM the specific steps need to be taken; Cleanliness of the ward, latrine and bathroom should be ensured; Regular monitoring and accountability system should be strengthened; 24-hour service for pharmacy and laboratory; Well-designed refreshers training program for service provider is needed; Sterilization/Disinfection facilities and practices should be ensured by the all user department; Overall health education and counseling for different services should be improved to a great extent; As regards to lower awareness of the services among the target population more steps should be taken to inform them about the benefit rendered at those centres through field workers and using different media.

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