Original Paper

Indoor Patient Satisfaction on Doctor's Care: A Tool to Improve Quality Service at Tertiary Level Military Hospital, Bangladesh

Munir AKMM¹, Halim AKMY²

Abstract

Introduction: Patient satisfaction Survey has become a regulatory Tool to ensure quality of services and efficient use of resources. To endure quality service In-patient departments, doctors' care undoubtedly a useful measure in CMH (Combined Military Hospital) where the number of patient flow is increasing day-by-day.

Objective: To find out the perceptions and expectations of the patients from the doctors in a tertiary level military hospital.

Materials and Methods: In this descriptive cross sectional study 372 respondents were selected among the admitted patients of CMH Bogra. Respondents were randomly selected from all wards and were interviewed with a semi-structured questionnaire from May 2015 to December 2015.

Results: Out of 372 respondents, 68.8% were in age group between 25 to 50 years and majority (69%) of them were army personnel. Overall patients' highly satisfaction levels on doctor's services were doctors' attitude (66%), patients' privacy maintenance (61%), regular Ward visit (70%), counselling (59%) and importance of patients' opinion (62%). Requirement of increased number of doctors and initiation of professional development program (PDP) for physicians were found important.

Conclusion: In Military Hospital, doctors are more accountable to their work. Therefore a management approach must be higher with more complicated expectation levels. This study showed a higher level of indoor patient satisfaction with doctors care at CMH Bogra.

Key-words: Health care services, patient satisfaction, Combined Military Hospital.

Introduction

Patient is one who decides the quality, who accepts the medical services who makes others to accept it, who gives correct feedback about the performance of hospital¹. Due to educational qualification and technical superiority always a gap remains between doctors and patients. It is also an important barrier in building a good doctor patient relationship. Patient's perceptions about health care system seem to have been largely ignored by the health care managers in the developing countries². The concept of achieving quality in medical services is relatively new in military hospital milieu3. In India and Pakistan few studies were conducted in some military hospitals^{1,3,4}. Study on patient satisfaction is also available on Iran's military hospital⁵. No such study is available on any of the Combined Military Hospitals of Bangladesh. Banu et al in their study did not find any published literature on such study at tertiary level hospital in Bangladesh⁶. Patient satisfaction is an established yardstick to measure quality of the services being provided in the health facilities².

Evaluation of patient satisfaction was mandatory for all French hospitals⁷. In Germany, measuring satisfaction has been required since 2005 as an element of quality management reports⁸. Since 2002, England launched a survey program of patient satisfaction on an annual basis⁹. Therefore, measurement of patient satisfaction is a legitimate indicator for improving the services and strategic goals for all healthcare organizations¹⁰.

Patient satisfaction may be defined as patient reported outcome measure¹¹. Iftikhar et al pointed out that patient satisfaction mostly appears to represent attitudes towards care or aspects of care¹². While Rama and Kanagaluru referred to patient satisfaction as patients' emotions, feelings and their perception of delivered healthcare services¹³.

1. Lt Col AKM Mashiul Munir, SUP, MBBS, MPH (Hospital Management), Assistant Military Secretary, Army Headquarter, Dhaka 2. AKM Yunus Halim, MBBS, MPhil, RPSGT (USA), RST (USA), PhD, Vice Principal and Associate Professor of Biochemistry, Army Medical College, Bogra.

All the authors agreed that there is an impact of measuring patient satisfaction on quality improvement of care ¹⁴. Patient satisfaction reflects patients' involvement in decision making and their role as partners in improving the quality of healthcare services ¹⁵. There is a great variation in questionnaires as instruments of measuring patient satisfaction. In USA majority of the institutions use an internally developed instrument ¹⁶.

The unavailability of the doctors, their negative attitudes and behaviours are major hindrances to the utilization of public hospitals⁵. These can play a powerful role to generate negative attitudes and dissatisfaction with health care services. Consequences of patient dissatisfaction includes noncompliance to treatment regimen, failing to pursue follow-up care and in extreme cases resorting to negative words that dissuades others from seeking health care from health care system⁵.

Bangladesh Armed Forces consists of a diverse population of young healthy Bangladeshi soldiers. Their dependents, parents, in laws, civilians who are paid from defence budget and also the retired personnel are availing medical facilities from Combined Military Hospital (CMH). The population has diverse socio- economic status based on their social, cultural and educational background as well as the prevailing rank structure.

CMH Bogra is the only tertiary level military hospital in North Bengal. The referral cases come to this hospital from five peripheral military hospitals¹⁷. The catchment population of this hospital is nearly 4,00,000. Average bed occupancy rate per day is 151.66 with annual average patient load¹⁸ of 98,909. This hospital is on the roadside of Dhaka-Rangpur highway and having a good communication with neighbouring districts and Upazillas. Due to better education facilities and affordable cost of living a large number of soldier's family stay around Bogra Cantonment. Hence study on patient satisfaction with indoor settings would reflect the complete picture of all CMHs of Bangladesh.

The present study was carried out to assess the quality of services provided to the patients admitted in Combined Military Hospital (CMH), Bogra. This study was conducted with an aim to find out the expectations and perceptions of the patients from the doctors in a tertiary level military hospital. The survey questionnaire was developed basing on local perspective and was supplied in Bangla to make it respondent friendly.

Materials and Methods

This was a descriptive cross sectional study and carried out among 372 patients who were admitted in CMH Bogra. A focus group discussion was organized with the doctors and nurses separately before conducting the study. The admitted patients were randomly selected from all wards and were interviewed. The patients who stayed in the hospital for more than 72 hours were interviewed. The study was conducted from 21 May 2015 to 31 December 2015.

All the respondents were interviewed using semistructured questionnaire which includes:

- 1. Age, sex and educational status of the respondents.
- 2. The present rank of the respondents (Rank was not applicable for the family members and retired personnel).
- 3. Regular visit to the patients by the doctor.
- 4. Attention of doctor towards the patients.
- 5. Importance of patient's opinion in overall treatment.
- 6. Privacy of patients during physical examination.
- 7. Counselling by the doctor including preoperative procedure and postoperative management.

The questions included in this study were replied in choices like excellent/good/bad/not applicable. For discussion purpose excellent was considered as highly satisfied, good as satisfied and bad as dissatisfied. In case of paediatric (less than 12 years) patients, the opinion of caregiver or parents was taken. Informed verbal consent was obtained before data collection. The purpose and method of the study was explained. All the respondents were assured of complete anonymity and confidentiality. The protocol was submitted to the Ethical Committee of Directorate General Medical Services and necessary permission was obtained. At the same time approval to conduct the study was taken from General Officer Commanding (GOC) of 11 Infantry Division, Bogra Cantonment.

Results

Total 372 respondents were interviewed. Majority of the respondent's age was in between 25 to 50 years (68.8%) ranging from 18 to 82 years. Among the respondents 251 (67.5%) were male and 121(32.5%) were female with male-female ratio of 2.1:1. Regarding occupation of the respondents 44.4% were serving soldiers and NCO (Non Commissioned Officers), 29.8% retired armed forces personnel and 15.9% were family members followed by 6.2% JCO (Junior Commissioned Officers), 3.2% Commissioned Officers and 0.8% were civil employees who are paid from

defence budget. Literacy status of the respondents showed that majority were literate and maximum (78.8%) were between SSC and HSC. Whereas 9% each by below SSC and graduates or above.

Table-I: Distribution of respondents regarding their socio-demographic characteristics (n=372)

Characteristics		Number of Patients	Percentage
	18-25 years	80	22
Age	25-35 years	127	34
	35-50 years	129	35
	Above 50 years	35	9
	Below SSC	32	9
Educational status	SSC passed	173	46
	HSC passed	120	32
	Bachelor degree and above	32	9
	Not mentioned	15	4
Gender	Male	251	67
	Female	121	33

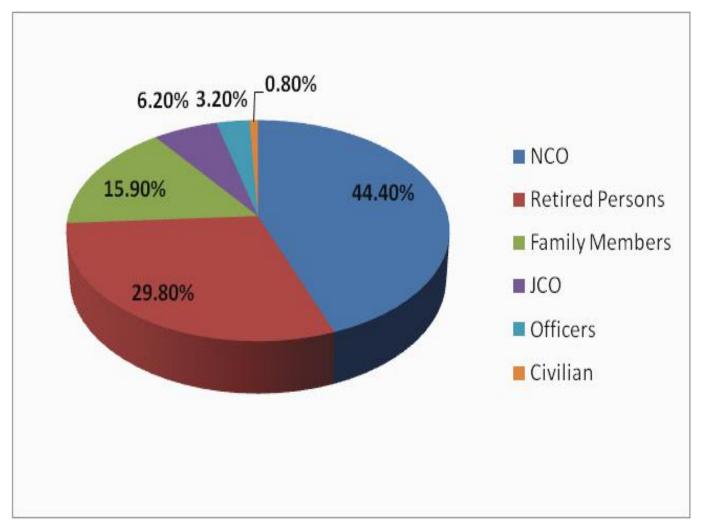


Fig-1: Distribution of the respondents by their status and rank (n=372)

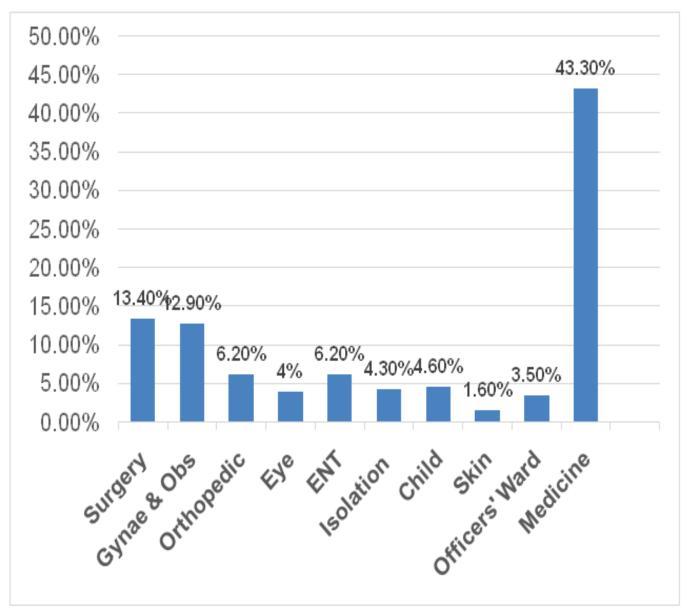


Fig-2: Distribution of the respondents as per admission in wards (n=372)

Table-II: Distribution of responses by the respondents on doctor's services in percentage (n=372)

Variables	Highly satisfied	Satisfied	Not satisfied	Not mentioned
Regular visit by the doctor	70	29	1	
Counselling by the doctor	59	35	1	5
Attitude towards you	66	32	2	
Importance of your opinion	62	36	1	1
Privacy maintenance	61	36	1	2

It is found in CMH Bogra that 70% of the respondents were highly satisfied on doctors for the daily ward visit. But counselling by the doctors could make 59% respondents highly satisfied and 66% were highly satisfied on doctor's attention towards the patient. Patients could participate in the treatment process as 62% were highly satisfied about importance of their opinion. Among the respondents 61% were highly satisfied about their privacy maintenance.

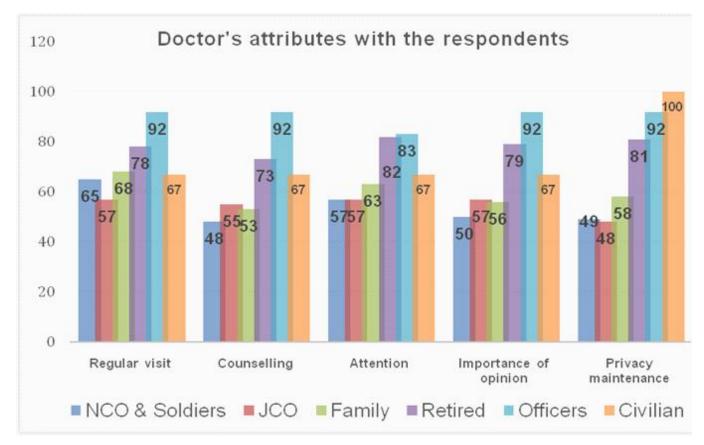


Fig-3: The bar diagram with cross tabulation shows the status and rank wise distribution of patient satisfaction (%) on various attributes related with doctor's services

The bar diagram showed in figure-3 reflects that the officers and retired persons are much happier on doctors than that of serving soldiers, their family and JCOs. Only three civilians were interviewed. This number is too less to draw an opinion. Out of 372 respondents only 94 forwarded suggestions in the supplied questionnaire. Among them 5% opined to increase number of doctors and 2% recommended for improvement of doctor's behavior with the patients.

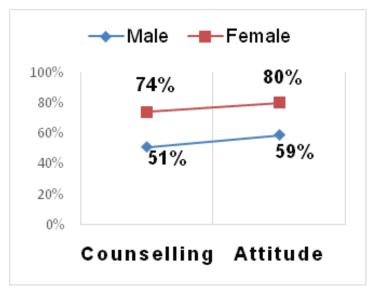


Fig-4: Line chart showing the relation between gender of the respondents and satisfaction on doctor's attitude and counselling

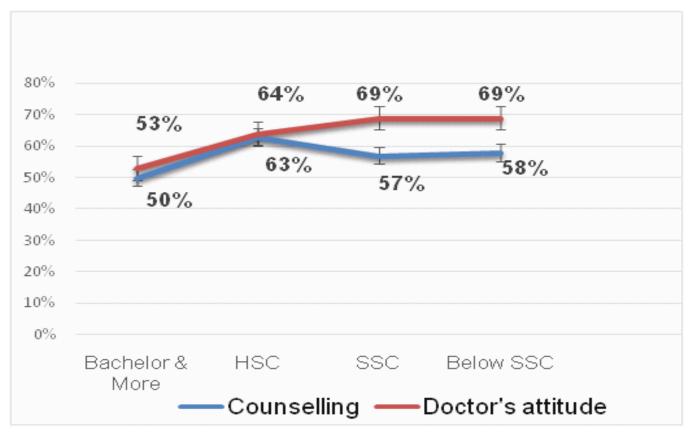


Fig-5: Line chart showing the relation between educational qualification of the respondents and satisfaction on doctor's attitude and counselling

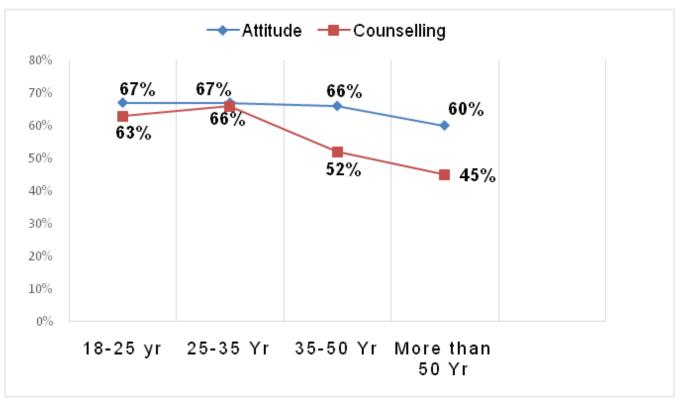


Fig-6: Line chart showing the cross tabulation by age of the respondents and level of satisfaction with doctor's attitude and counselling

Discussion

Military hospitals are responsible for maintaining, restoring and improving the health of Armed Forces personnel. A main objective of these hospitals is to provide high quality services to the patients. Military doctors, depending on the type of their service, military rules and regulations, they are more accountable than their civilian counterpart. Therefore a management approach in military hospitals must be higher with more complicated expectation levels. Unlike civil hospitals, the main approach of the military hospitals is based on military medicine. Increasing trends in combat, terrorist accidents, new development of war strategies, warfare and the effects thereof, military medicine is also under development. This calls for military doctors to acquire extraordinary knowledge, insight, skill and polished behaviour as such we set our benchmark at "highly satisfactory" level.

Usually Medicine, Surgery and Gynaecology ward bears the major patient load. It is observed that in Eye, ENT, Child, Skin, Isolation and Officers' ward the bed occupancy rate is low than that of other wards. This feature is also reflected in this study.

Doctor's attitude should be empathetic to the patient's problem and needs. It can greatly influence the patient satisfaction. Patients desire doctors to be attentive and understanding towards them⁵. Study conducted by Ahmad et al in Pakistan Navy Hospital Rahat, Karachi, have seen that 78.4% respondents were highly satisfied on doctor's attitude³. In India, Garg et al found it 20.4% in specialty hospitals⁴. Mishra and Mishra found 50% in super specialty tertiary hospital, India 19. Prasad et al conducted a study to find out the level of satisfaction at Narayana Medical College Hospital, India. They found 43% respondents were highly satisfied on doctor's attitude. In Haryana of India Qadri et al²⁰ found it 46.8%. Laila also opined after a study in Dhaka Medical College Hospital that the powerful predictors for patient satisfaction is doctor's attitude and behaviour²¹. In Bangladesh Chowdhury et al²² found this satisfaction level was 46.1%. In this study, it was 66% which reflects the scope of development.

Counselling by the doctor is vital for patient's satisfaction. It completes through proper communication. If a patient feels alienated, uninformed or uncertain about her health status and outcomes, it may affect the healing process. Proper counselling can alleviate the feeling of uncertainty. In this study 59% of the respondents were highly satisfied on counselling by the doctors. Which was 82.7% in Pakistan

Navy Hospital Rahat, from Ahmad et al³, 97.3% in India by Garg et al⁴, 23% in Narayana Medical College Hospital, India²³. It is obvious that for effective treatment outcome emphasis on counselling by the doctor needs to be improved.

Previously conducted studies by Hall in US²⁴ and Aragon's study²⁵, both cited in Ahmad et al of Pakistan Armed Forces³ shows that age and gender do not have profound impact on satisfaction level. This study finding was same for age and we also did not find any relation between education and satisfaction. Whereas Rahman et al found in Bangladesh that age and education were negatively related with satisfaction²⁶. But Laila²¹ conducted a study in Dhaka Medical College Hospital. There she found inpatient's education have significant effect on patient's satisfaction. In this study we found that gender has significant effect on patient's satisfaction. This is also same with Laila²¹.

It is customary that every day the treating doctor should visit the admitted patients. As per the patient's feedback concern the satisfaction level should be 100%. But in this study we found that only 70% respondents were highly satisfied on regular visit by doctors. A study conducted by Khan²⁷ in 2012 at Dhaka Medical College Hospital found this satisfaction was 69%. In Haryana of India, Qadri et al²⁰ found it 46%.

It is the fundamental right of the patients that their opinion regarding treatment to be taken into importance. It also falls under medical ethics that doctor will consult with the patient for his treatment. In this study only 62% respondents were highly satisfied on doctors in taking their opinion. In India, Garg et al⁴ found it 97.8% in specialty hospitals.

Privacy maintenance is a major issue in any type of treatment. At any cost breach of patient's privacy is not accepted. In this study only 61% respondents were highly satisfied on doctors with their privacy maintenance. Lin et al conducted a quasi-experimental study on privacy maintenance in Taiwan²⁸ where highly satisfaction level was 24.3%.

In this study respondents were interviewed with five independent variables related with doctor's service. All these variables strongly affect the dependent variable that is satisfaction of the respondents (Chi square test significant). More than 90% of the commissioned officers

were highly satisfied on regular visit and counselling by the doctors, attention paid by the doctors, importance of respondent's opinion and privacy maintenance. But these satisfaction levels were not that much higher in Soldiers, NCOs, JCOs and their families. Bangladesh Armed Forces have a unique rank structure like other military of the world. Though treatment is same for everybody but reception, waiting facilities, waiting queue, personal relation of the doctors all affect the satisfaction of the respondents. These might be the causes of difference in satisfaction level. However, this can be reduced with the effort of the doctors as well as management efficiency.

Conclusion

The expectation of Bangladesh Armed Forces personnel have increased day by day. Patient satisfaction is undoubtedly a useful measure which is based on patient's accurate assessments. Still we could not reduce the gap between patient's expectation and doctor's care. Considering the importance of role of doctors in patient satisfaction, health policy makers of Bangladesh Armed Forces ought to initiate a professional development program (PDP) for physicians. A multidisciplinary approach is essential to win the hearts and minds of the patients with emphasis on increasing the number of doctors. This study concludes that the majority of the patients were satisfied on the doctors. Although there are some limitations in this study including its small sample size, however, the findings will be useful in planning and formulating future policies to improve quality health services in any of the CMH of Bangladesh.

References

- 1. Demir C, Celik Y. Determinants of patient satisfaction in a military teaching hospital. *J Healthc Qual* 2002; 24(2):30-4.
- 2. Kumar M, Kashyap V, Sagar V at el. An Assessment of Patients Satisfaction with Services Obtained From a Tertiary Care Hospital in Ranchi, India. *IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)* 2016; 15(4):129-34.
- 3. Ahmad M, Iqbal MH and Haq R. In-patient Services Satisfaction Survey in PNS Rahat Hospital Karachi. *Pak Armed Forces Med J* 2015; 65(6):789-92.
- 4. Garg N, Gupta SK, Mahesh R. Patient Satisfaction Survey at a Tertiary Care Speciality Hospital. *JRFHHA* 2014; 2(2):79-83. DOI:10.5005/jp-journals-10035-1019
- 5. Zaboli R, Shokri M, Javadi MS et al. Factors Affecting Quality of Emergency Service in Iran's Military Hospitals: A Qualitative Study. *Electron Physician* 2016; 8(9):2990–7.

- 6. Banu LA, Yesmin ZA, Amin NF and Bose SK. Disparity between Patient's Expectation and Health Care Provider's Service. *Int J Modn Res Revs* 2015; 3(6):691-4.
- 7. Laurent B, Patrice F, Elisabeth D et al. Perception and use of the results of patient satisfaction surveys by care providers in a French teaching hospital. *International Journal for Quality in Health Care* 2006; 18(5):359–64.
- 8. Tonio S, Joerg K and Joachim K. Determinants of patient satisfaction: a study among 39 hospitals in an in-patient setting in Germany. International Journal for Quality in Health Care 2011; 23(5):503-9.
- 9. Crispin J, Angela C and Stephen B. The Picker Experience Questionnaire development and validation using data from in-patient surveys in five countries. *International journal of quality in Health Care* 2002; 14(5):353-8.
- 10. Yellen E, Davis GC, Ricard R. The measurement of patient satisfaction. *J Nurs Care Qual* 2002; 16(4):23-9.
- 11. Bjertnaes OA, Sjetne IS, Iversen HH. Overall patient satisfaction with hospitals: Effects of patient reported experiences and fulfilment of expectations. *BMJ Qual Saf* 2012; 21(1):39-46.
- 12. Iftikhar A, Allah N, Shadiullah K et al. Predictors of Patient Satisfaction. *Gomal Journal of Medical Sciences* 2011; 9(2):183-8.
- 13. Mohan DR, Kumar KS. A Study on the Satisfaction of Patients With Reference to Hospital Services. *Zenith International Journal of Business Economics & Management Research* 2011; 1(3):15-25.
- 14. Al-Abri R and Al-Balushi A. Patient Satisfaction Survey as a Tool towards Quality Improvement. *Oman Med J* 2014; 29(1):3–7.
- 15. Sarah LC, Lei J, Wendy L et al. Does Doctor-Patient Communication Affect Patient Satisfaction with Hospital Care: Results of an Analysis with a Novel Instrumental Variable? *Health Serv Res* 2008; 43(5 Pt 1):1505–19.
- 16. Linda DU. Patient satisfaction measurement: current issues and implications. *Lippincott's Case Management* 2002; 7(5):194-200.
- 17. Munir AKMM and Halim AKMY. Patient Satisfaction with Hospital Health Care Services: Outpatient Settings of CMH Bogra. *JAFMC* 2015; 11(2):61-8.
- 18. Annual Health Report 2016. Army Headquarters, Adjutant General Branch, Medical Directorate. Bangladesh Army:38-9.
- 19. Mishra and Mishra. Study of Patient Satisfaction at a Super Specialty Tertiary Care Hospital. *Indian Journal of Clinical Practice* 2014; 25(7):624-31.
- 20. Qadri SS, Pathak R, Singh M et al. An Assessment of Patients Satisfaction with Services Obtained From a Tertiary Care Hospital in Rural Haryana. *International Journal of Collaborative Research on Internal Medicine & Public Health* 2012; 4(8):1524-37.

- 21. Laila A. Factors Determining Inpatient Satisfaction with Hospital Care in Bangladesh. *Asian Social Science* 2011; 7(6):15-24.
- 22. Chowdhury S, Hossain SA and Halim A. Assessment of quality of care in maternal and newborn health services available in public health care facilities in Bangladesh. *Bangladesh Medical Research Council Bulletin* 2009; 35:53-6.
- 23. Prasad MV, Kumar SS, Agrawal A et al. Level of satisfaction in patients/attendants admitted with traumatic brain injury at an advanced ER/Casualty in a Tertiary Care Teaching Hospital. *Journal of Hospital Administration* 2013; 2(2):89-96.
- 24. Hall MF, Press I. Keys to patient satisfaction in the emergency department: Results of a multiple facility study. Hosp Health Serv Adm 1996; 41(4):515-32.

- 25. Aragon SJ, Gesell SB. A patient satisfaction theory and its robustness across the gender in the emergency department: A multi group structural equation modelling investigation. *Am J Med Qual* 2003; 18:229-41.
- 26. Rahman MM, Shahidullah M, Shahiduzzaman M et al. Quality of Health Care from Patient Perspective. *Bangladesh Med Res Counc Bull* 2002; 28(3):87-96.
- 27. Khan S. Medical Service Facility of the Dhaka Medical College Hospital (DMCH): An Analysis. *World Journal of Social Sciences* 2012; 2(5):58-78.
- 28. Lin YK, Lee WC, Kuo LC et al. Building an ethical environment improves patient privacy and satisfaction in the crowded emergency department: A quasi-experimental study. *BMC Med Ethics* 2013; 14:8.