

Assessment of Patient Satisfaction: Experience from Eye Department in a Tertiary Care Public Hospital

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Abstract

Patient satisfaction is considered an integral part of hospital management and quality services of healthcare system. A descriptive cross-sectional study will be conducted to understand the relationship between patient satisfaction and trigger factors and for this purpose data will be collected from three public tertiary hospitals (National Institute of ophthalmology & hospital, Dhaka. Government of Bangladesh allocated remarkable proportion of GDP for health and education. This effort has a positive impact on health and education sector in Bangladesh. Every year the demand of health care is increasing and health sector facing difficulties to maintaining the principle of high quality health care delivery. The objective of the study is to assess the level of satisfaction of patients attending the eye department of National institute of ophthalmology & Hospital, Dhaka medical college hospital, Rangpur medical college hospital and utilize the hospital service and determine the factors related to their satisfaction. The quantitative data has been collected from the hospital setting following a descriptive cross-sectional study method. Age, gender, education, occupation, marital status and number of visits were considered as an independent variable whereas as convenience, courtesy, care quality, pocket cost and physical environment will identify as dependent variables. Per capita income, distance from the hospital etc will consider as Confounding variables. A total 384 patients were interviewed following random sampling techniques from outdoor and inpatient department. Collected data was entered into SPSS for analysis. Appropriate statistical analysis were done here. An ethical approval was obtained from the NSU public health department. The patients were asked to evaluate the overall performance of the hospital. The majority (60.5%) said average and 39.5% said good. So we could conclude that the patient satisfaction is very important to increase the flow of patient and reduce the burden of eye related service. Quality of care, doctor and staff attitude and behavior need to improve to enhance the satisfaction level of patient. Hospital general hygiene facility also need to improve.

Keywords: Patient satisfaction, eye health, quality of care, hospital management.

Manuscript

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(J.Natl.Inst.Ophthalmol.2023;6(2):58-66)

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Introduction

Hospital health care services is to considered is the right of the patient irrespective of public and private sector. Tertiary health care services in Bangladesh is the major place for patient to get quality health care. Health care delivery system aim is to improve the quality of service and satisfied the service recipient. The effective healthcare system is integral part of improving the patient care and ensure the basic healthcare. Evidence show that Bangladesh healthcare system is trying to improve its quality of care to fulfill the increasing demand of patients (Aldana et al., 2001). There are many factors that influence the patient satisfaction like-skills of service providers, quality of care, hospital service facility and service cost. Clinical and non-clinical actors also influence the patient satisfaction. We

Received: 23 Aug. 2023 Accepted: 17 Nov. 2023

have no good data on such patient satisfaction in Bangladesh and we can't determine the level of patients' satisfaction and how it influence by clinical and non-clinical factors. We need an empirical evidence to validate our above assumption and to develop good framework to improve the quality of care and ensure the patient satisfaction of Bangladesh. This study aim was to assess the clients' satisfaction with the services provided in a well reputed multi-disciplinary three tertiary eye hospital in Bangladesh.

Materials and Method

The General objective of the study was to assess the level of satisfaction of patients attending the hospital services at eye three tertiary eye health care hospital in Bangladesh. The Specific objectives were to assess the level of satisfaction with the services provided by the eye department, to assesses the patients need for seeking services determine the relation between the level of socio demographic factors, and satisfaction, to identify the relationship between the patient attitude and the level of satisfaction; to determine the relationship between the need factors towards the services and the satisfaction level and to describe the patients' opinions and suggestion on improving the services of eye department.

Study design: The study was descriptive type Cross-sectional. **Study area:** Study was conducted in tertiary eye hospitals of Dhaka named the National Institute of Ophthalmology & Hospital received eye care services from outpatient department, inpatients department. **Study population:** The patients visiting the ophthalmology departments of the National Institute of Ophthalmology & hospitals will be considered the study population. The population who will be selected randomly with considering the inclusion criteria and exclusion criteria from the study population. **Sample size:** The sample size was estimated using the following formula of cross sectional survey.

Sample size formula: $n = Z^2 pq / e^2$ and sample size was 379 Sampling method: Participants were selected by the purposive sampling method. **Inclusion Criteria:** All the patients attending National Institute of ophthalmology and hospital for eye care. **Exclusion Criteria:** Patients who are suffering from other medical complication with ophthalmic problem.

Study duration: Six months from January 2021 to July 2021. Data collection tool: A pretested semi-structured checklist was used to collect information from the participants. The checklist will include questions regarding diagnosed disease, referral information, advised investigations, and the patient's sociodemographic information. **Data collection procedure:** A team will develop and experienced data collectors were recruited and trained for data collection. This team was collected data from all the study sites for twelve days. In the outpatient departments, at first, the patients were screened according to the selection criteria. After getting informed consent from the eligible participants, the interviewers were asking questions and fill out the checklist. All the answers were recorded in written form.

Results:

Socio-demographics Characteristics of the respondents: Our data indicated that the majority (73%) of the patient aged between 36 and 90 years with a mean age of 49.19 ± 17.53 years (Figure-1). This statistic means a large number of patient were older and few were younger. About 55% of patient were male and 45% were female. About 87% of respondents were married and 13% were single. The majority (45.2%) of the patient had passed class 5-6, 29.7% had passed class 3-4, 20.1% had passed class 7-8 and 5% had passed class 1-2. There is a strong association between level of education of respondents and reasons of selection of the hospital for receiving treatment ($\chi^2 = 76.22$; Gamma $V = .13$, Lambda $\lambda = .052$ df = 12; Sig; $P < .001$) (Table-1).

Table-1: Percentage Distribution of education of the Respondents by reasons of selection of the hospital for treatment

Education Categories	Quality of services n= 171 %	Distance n=111 %	Recommended by others n= 94 %	Distance n=111 %	Distance n=111 %
Class 1-2 pass	2.90	1.10	.80	-	4.80
Class 3-4 pass	-	.80	4.00	-	4.80
Class 5-6 pass	21.60	15.70	12.80	.60	50.70
Class 7-8 pass	21.20	11.90	7.2	-	40.30
Total	45.70	29.50	24.80	.60	100.0
$\chi^2 = 76.22$; Gamma V= .13, Lamda $\lambda = .052$ df = 12; Sig; P= < .001					

Patient opinion about hospital services:

About 40.2% patient opined that this is their first time visit at the hospital whereas 59.8% said that they had visited several times of the hospital. We asked patient why they choice this hospital for receiving the treatment. The reasons of visiting hospital were quality of service (45.5%), distance (29.6%), recommended by other (24.6%) and low cost (.3%) respectively. About 34.9% patient informed on hospital treatment from newspaper followed by doctor-homeopathy (34.1%), neighbor (20.4%), friend (10.1%), doctor-MBBS (.3%) and other source (.3%) (figure-5). We did cross-tabulation to find the association between sources of information about hospital treatment and level of education of the respondents. From the cross-tabulation we found a strong association between source of information and level of education of the respondents ($\chi^2 = 91.18$; Gamma V= .39, Lamda $\lambda = .32$ df = 18; Sig; P< .001) (Table-2). The vast majority (93.5%) of patients were get admission through outdoor whereas 6.5% admitted through emergency department. A question about doctor attitude and behaviors during providing treatment about 79.9% said average, 10.1% said good and 10.1% think that it was excellent. About 57.6% patient think that time given by doctor to listen their eye problem is good, 25.2% said poor, 11.5% said average and 5.8%

mentioned excellent. Doctor explanation to patient about eye problem and treatment required is important to increase the patient satisfaction. About 58.2% patient said that doctor explanation was good, 23.8% said it was poor, 6.3% said it was average and 11.6% said that it was excellent. About 46% of the respondents said that staff attitude and behavior was average, 32% said poor and 22% said that staff attitude and behavior was excellent. About promptness regarding providing treatment to patient about 46.3% said average, 35.7% said good, and 19% said poor. Regarding nurse/optometrist and counselor explanation on treatment and prognosis majority of patient was unhappy. About 47% said that MLOP explanation on treatment and prognosis is poor and 53% said it was average. The status of general cleanliness was good (62.7%) and average (37.3%). The patient was happy with cleanliness in the ward compared to general cleanliness of the hospital. About 64% said that ward cleanliness was good and 36% said it was excellent. The patient was not happy about general facilities of the hospital. About 66.5% said that the facilities were average, 31.5% said good and 2% said poor. Attendee was unhappy with outdoor toilet facilities. About 56.5% said that the facilities were average and 43.5% said poor (Table-2).

Table-2: Respondents opinion on quality of services, staff attitude and health and hygiene condition of the hospital.

Characteristics/Variables	Frequency (n)	Percentage (%)
Staff attitude and Behavior	379.0	100.0
Poor	118	32.0
Average	174	46.0
Good	87	22.0
Excellent	-	-
Promptness during received of treatment	379.0	100.0
Poor	69	19.0
Average	175	46.3
Good	135	35.7
Excellent	-	-
Nurse/optometrist/counselor explanation on treatment & Prognosis	379.0	100.0
Poor	177	47.0
Average	202	53.0
Good	-	-
Excellent	-	-
Status of general cleanliness of the eye hospital	379.0	100.0
Poor	-	-
Average	142	37.3
Good	237	62.7
Excellent	-	-
Status of cleanliness of cabin or ward		
Poor	-	-
Average	-	-
Good	241	64.0
Excellent	138	36.0
Status of general facilities of the hospital	379.0	100.0
Poor	6	2.0
Average	251	66.5
Good	121	31.5
Excellent	-	-
Status of outdoor toilet facility	379.0	100.0
Poor	165	43.5
Average	214	56.5
Good	-	-
Excellent	-	-

Response to question on hospital investigation facilities average (46%), good (42.5%), excellent (3%) and poor (8.5%). About one- third (34%) was unhappy about medicine facility in the hospital pharmacy, 34% said average and 32% said medicine service was excellent. On an average 56% patient were happy with emergency services of the hospital whereas 35% said it was excellent and 9% said that emergency services

were poor. Time allocated by doctor at emergency room to listen the problem of the patient was not satisfactory. About 44% patients were unhappy, 38% said the spent time by doctor was average and 18% said it was good. Emergency department explanation on eye health issue and treatment about 34% said that it was poor, 34% said average and 32% said good (Table-3).

Table-3: Investigation, Pharmacy/Medicine and Emergency services of the hospital

Characteristics/Variables	Frequency (n)	Percentage (%)
Investigation facilities at outdoor department	379.0	100.0
Poor	32	8.5
Average	173	46.0
Good	161	42.5
Excellent	12	3.0
Availability of medicine in the hospital Pharmacy	379.0	100.0
Poor	-	-
Average	130	34.0
Good	130	34.0
Excellent	118	32.0
Emergency services of the hospital	379.0	100.0
Poor	32	9.0
Average	212	56.0
Good	134	35.0
Excellent	-	-
Doctor of emergency department spent time to listen to the patient eye problem	379.0	100.0
Poor	168	44.0
Average	144	38.0
Good	66	18.0
Excellent	-	-
Emergency department explanation on eye health issue and treatment	379.0	100.0
Poor	130	34.0
Average	130	34.0
Good	119	32.0
Excellent	-	-

We asked patient about hospital outdoor and inpatient services. In a question to waiting time of outdoor department about 38.5% said that waiting time is long, 46.9% average, 6.5% said reasonable, 7% said very long and 1.3% said not all long. Whereas for the inpatient department waiting time patient satisfaction was quite good

compared to outdoor. About 58% said it was reasonable, 36% said it was not too long and 6% said average. About admission process of inpatient department patient was quite happy. About 71% said it was average and 29% admission process was good (Table-3).

Table-4: Patient opinion on hospital outdoor facilities and inpatient services

Characteristics/Variables	Frequency (n)	Percentage (%)
Patient experience on waiting time of outdoor department	379.0	100.0
Very Long	26	7.0
Long	145	38.5
Average	177	46.9
Reasonable	26	6.5
Not All	5	1.3
Patient experience on waiting time of Inpatient department	379.0	100.0
Very Long	-	-
Long	-	-
Average	22	6.0
Reasonable	221	58.0
Not All	136	36.0
Admission process of inpatient department	379.0	100.0
Poor	-	-
Average	269	71.0
Good	110	29.0
Excellent	-	-

The important fact is that majority of the patient were happy on charges and cost of services of the hospital. About 66.8% said the charges and cost of hospital was low and 33.2% said the charges and cost is reasonable of the hospital (figure-1).

Percentage distribution of patient opinion about charges and costs of services of the hospital

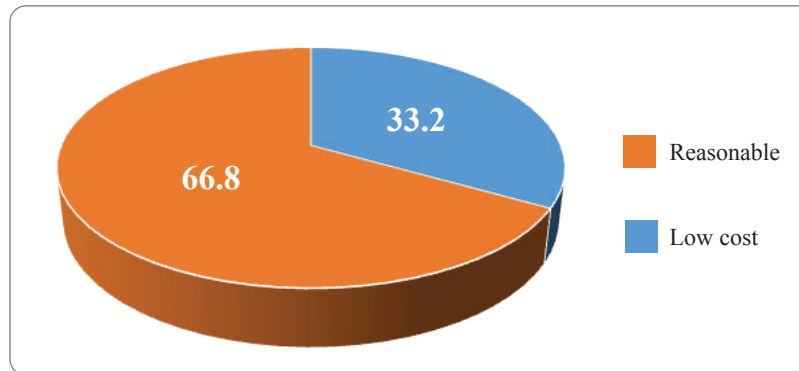


Figure-1: Percentage of patient opinion about charges and cost of services of the hospital.

We asked patient about their recommendations to refer patient to receive the services from the hospital. About 54.8% were confused, 15.2% said that they will not recommend the hospital for receive the services and 30.1% said that they will recommend as second option (figure-2).

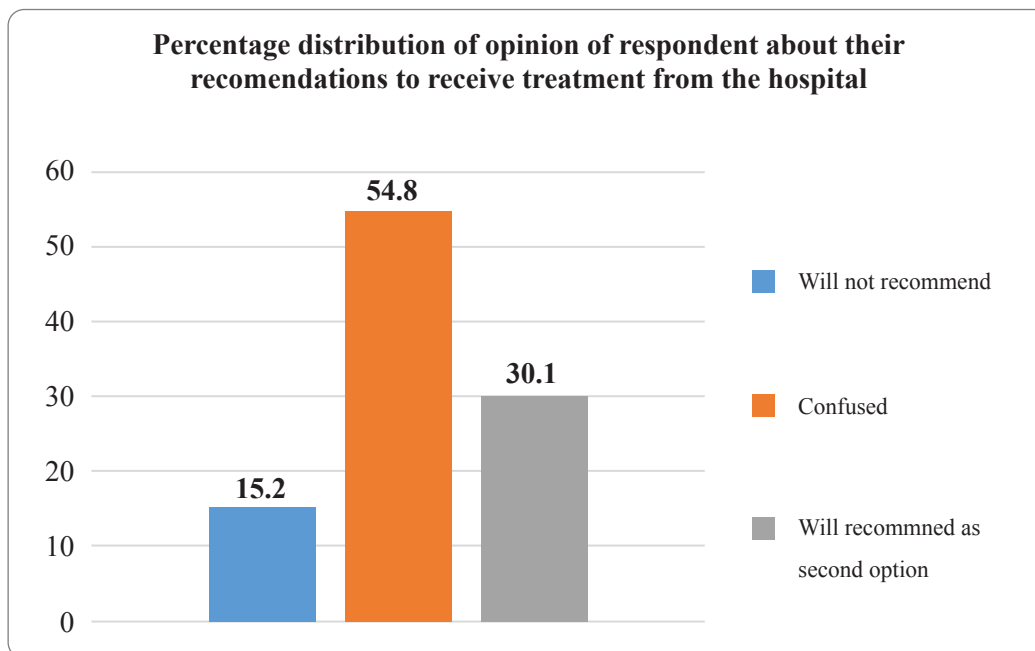


Figure-2: Percentage distribution of opinion of respondents about their recommendations to receive treatment from the hospital.

We asked patient to evaluate the overall performance of the hospital. The majority (60.5%) said average and 39.5% said good.

Discussion:

We had interview 379 patient from the tertiary hospital and data was collected through face to face interview. Our synthesis data show that the majority (73%) of the patient aged between 36 and 90 years with a mean age of 49.19 ± 17.53 years (Figure-1). This statistic means a large

number of patient were older and few were younger. About 55% of patient were male and 45% were female. About 87% of respondents were married and 13% were single. The level of education of the respondents were very poor and the vast majority of respondents were primary

school pass. This statistic indicates that rural poor people and low educated people prefer to receive the treatment from government hospital in Bangladesh. We found association between level of education of respondents and reasons of selection of the hospital for receiving treatment. This meant that rural low level of educated people disseminated hospital treatment issue after returned to local area and they have no option to find another hospital facility due to their low level of education. As result of it we found that 60% patient had experienced of visiting of hospital several times for the treatment purpose. Usually majority of the patient visit several times of the hospital due to quality of service (45.5%), distance (29.6%), recommended by other (24.6%) and low cost (.3%). The interesting fact is that majority of the patient informed about the hospital treatment from informal channel like homeopathy-doctor (34.1%), neighbor (20.4%), and friend (10.1%). We found association between sources of information about hospital treatment and level of education of the respondents. We also found association between source of information and level of education of the respondents. Hospital outdoor is so busy and we found that vast majority (93.5%) of patients were get admission through outdoor whereas 6.5% admitted through emergency department. The big concern issue is that majority of the patient were unhappy on doctor attitude and behavior. A mentionable portion said that doctor give enough time to listen their eye problems but level of explanation on eye health problem and treatment is poor. Patient opinion about staff attitude and behavior was average and its indicates that patient level of satisfaction is poor. This study finding is very much close with study conducted Islam et al (2012) and they found that patient was not happy to staff attitude and behavior in the tertiary eye care services in Bangladesh. Regarding nurse/optometrist and counselor explanation on treatment and prognosis majority of patient was unhappy. Patient also unhappy about MLOP explanation on treatment and prognosis. The patient was happy with cleanliness in the ward

compared to general cleanliness of the hospital. About 64% said that ward cleanliness was good and 36% said it was excellent. The patient was not happy about general facilities of the hospital. About 65% said that the facilities were average, 31.5% said good and 2% said poor. Attendee was unhappy with outdoor toilet facilities. About 56.5% said that the facilities were average and 43.5% said poor. Response to question on hospital investigation facilities and majority of the respondents were unhappy. About one- third was unhappy about medicine facility in the hospital pharmacy. On an average 56% patient were happy with emergency services of the hospital. Time allocated by doctor at emergency room to listen the problem of the patient was not satisfactory. About 44% patients were unhappy, 38% said the spent time by doctor was average and 18% said it was good. Emergency department explanation on eye health issue and treatment about 34% said that it was poor, 34% said average and 32% said good. We asked patient about hospital outdoor and inpatient services. Waiting time of outdoor department patient said that it was long. Whereas for the inpatient department waiting time patient satisfaction was quite good compared to outdoor. The important fact is that majority of the patient were happy on charges and cost of services of the hospital. The satisfaction due to government subsidy in hospital level and charges and treatment cost is low. We asked patient about their recommendations to refer patient to receive the services from the hospital. The alarming issue is that majority of the were confused. We asked patient to evaluate the overall performance of the hospital and the majority of the respondents said that it was average.

Conclusion:

The patient satisfaction is very important to increase the flow of patient and reduce the burden of eye related service. Quality of care, doctor and staff attitude and behavior need to improve to enhance the satisfaction level of patient. Hospital general hygiene facility also need to improve.

References

- World Health Organization. Global initiative for the elimination of avoidable blindness. 2000. https://apps.who.int/iris/bitstream/handle/10665/63748/WHO_PBL_97.61_Rev.2.pdf.
- Thylefors B, Negrel AD, Pararajasegaram R, Dadzie KY. Global data on blindness. *Bull World Health Organ*. 1995;73:115–21. <https://pubmed.ncbi.nlm.nih.gov/12486591/>?report=abstract. Accessed 21 Feb 2021.
- Arnold J. Global cataract blindness: The unmet challenge. *British Journal of Ophthalmology*. 1998;82:593–4. doi:10.1136/bjo.82.6.593.
- Mathers CD, Loncar D. Projections of global mortality and burden of disease from 2002 to 2030. *PLoS Med*. 2006;3:2011–30.
- Dineen BP. Prevalence and causes of blindness and visual impairment in Bangladeshi adults: results of the National Blindness and Low Vision Survey of Bangladesh. *Br J Ophthalmol*. 2003;87:820–8. doi:10.1136/bjo.87.7.820.
- Bourne R, Dineen B, Ali S, Ophthalmology DH-. 2004 undefined. Prevalence of refractive error in Bangladeshi adults: results of the National Blindness and Low Vision Survey of Bangladesh. Elsevier. <https://www.sciencedirect.com/science/article/pii/S0161642004001319>. Accessed 20 Feb 2021.
- Alkhamis A. Health care system in Saudi Arabia: an overview. *East Mediterr Health J*. 2012;18:1078–9. doi:10.26719/2012.18.10.1078.
- Alkainaidri A, Alsulami H. Improving Healthcare Referral System Using Lean Six Sigma. *Am J Ind Bus Manag*. 2018;08:193–206. doi:10.4236/ajibm.2018.82013.
- Tabish SA. Referral System in Health Care. 2010. https://www.researchgate.net/publication/261957501_Referral_System_in_Health_Care. Accessed 20 Feb 2021.
- Diba F, Ichsan I, Muhsin M, Marthoenis M, Sofyan H, Andalas M, et al. Healthcare providers' perception of the referral system in maternal care facilities in Aceh, Indonesia: a cross-sectional study. *BMJ Open*. 2019;9:e031484. doi:10.1136/bmjopen-2019-031484.
- Joarder T, Chaudhury TZ, Mannan I. Universal Health Coverage in Bangladesh: Activities, Challenges, and Suggestions. *Adv Public Heal*. 2019;2019:1–12. doi:10.1155/2019/4954095.
- Secondary and Tertiary Healthcare. https://dghs.gov.bd/licts_file/images/Health_Bulletin/HB2012_CH/HB2012_CH5_Senondary-tertiary-HC.pdf. Accessed 20 Feb 2021. *American Medical Journal of Ethics*. November (2013).
- Attanayake A. Measures of equity, efficiency and quality of selected healthcare service. 2008.
- Barker, Hall. *Practical epidemiology*, Churchill Livingstone, Edinburgh. 1991;65-68:166-203.
- Dayaratne GD. Private Hospital Healthcare Delivery in Sri Lanka: Some Issues on Equity, Fairness, and Regulation. Research Studies. Working Paper Series No.
- Institute of Policy Studies of Sri Lanka. 2013. Colombo.
- Delbanco TT. Quality of care through the patients' eye. *BMJ*. 1996;313:832–833.
- Schoenfelder T, Klewer J, Kugler J. Determinants of patient satisfaction: a study among 39 hospitals in an in-patient setting in Germany. *Int J Qual Health Care*. 2011;23(5):503-509.
- Donabedian A. Evaluating the quality of medical care. *Milbank Q*. 2005;83(4):691-729.
- Hewageegana NSR. Evaluation of antenatal care provided at clinics and at home in the area of the Divisional Director of health Service, Haputale. Dissertation, Postgraduate Institute of Medicine, Colombo. PGIM. 1996.
- Hulka BS. "Scale for the Measurement of Attitudes toward Physicians and Medical Care," *Medical Care*. 1970;8:429-435.
- Jagdip S. "The Patient Satisfaction Concept: a Review and Reconceptualization", in NA - *Advances in Consumer Research* Volume 16, eds. Thomas K. Srull, Provo, UT: Association for Consumer Research. 1989;176-179.
- Jawahar SK. A Study of outpatient satisfaction in India. 2007. 24. Le bonfic (1987)-customers for life.
- Linda Powel. Patient satisfaction surveys for critical access Hospitals. 2001; 2-4.
- Mohideen B, Mohamed I. Determinants of patient satisfaction (ps) in public health service organizations (phso) in eastern province of Sri Lanka. 2013;13;2(18).
- Patient Satisfaction: History, Myths, and Misperceptions: *AMA Journal of Ethics*. 2013;11:982-987.
- Perera MDL. Assessment of selected aspects of quality of patient care at cardiology clinic general Hospital Kandy in year 2003. Dissertation, postgraduate Institut of Medicine, Colombo. PGIM. 2003.
- Tennakoon S. Patient Satisfaction Survey in a Sri Lankan Hospital. Thesis, Dissertation, Postgraduate Institute of Medicine. 1990; Colombo.
- Qunxiang Z, Peng Y, Lihua Z. "Investigation of Patients' Satisfaction Degree with Public Hospitals in the City of Hangzhou under the Background of New Medical Reform". *Modern Hospital Management*. 2012;197.
- R Baker. General Practice Unit, Department of Epidemiology and Community Medicine, University of Bristol. *British Journal of General Practice*. 1990;40:487-490.
- Thalagala DCS. Knowledge attitudes, Practices and satisfaction of patients towards drugs-prescribed at medical clinic of the National Hospital of Sri Lanka. 2003
- Wickramasinghe SC. On some reasons for inadequate use of child welfare clinic for growth monitoring in the municipal council area of Negambo. Dissertation, Postgraduate Institute of Medicine, Colombo. PGIM; 1994.
- Yeshambel AA, Amaluf FD, Measho GG. Patients' Satisfaction and Associated Factors among Private Wing Patients at Bahirdar Felege Hiwot Referral Hospital, North West Ethiopia. *Science Journal of Public Health*. 2014;2(5):417-423.