



Patients' Perceptions and Satisfaction with Outpatient Healthcare Services in a Public Healthcare Facility: Results from a Patient Exit Survey in Ghana

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Authors' contributions

This work was carried out in collaboration between all authors. Authors AMA, SM and OAI designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Author SM managed the analyses of the study. Authors AMA and OAI managed the literature searches. All authors read and approved the final manuscript.

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ABSTRACT

Introduction: Patient satisfaction is commonly used as an indicator to measure the quality of healthcare. It embodies the patient's perceived needs, expectations, and experience of healthcare. The aim of this study was to assess patients' perceptions and satisfaction with outpatient healthcare services at the Tamale Central Hospital in Northern Ghana.

Methods: This was a cross-sectional study conducted at the outpatient department (OPD) of Tamale Central Hospital in the Northern Region of Ghana. Purposive and convenient sampling methods were used to sample 385 outpatients. Exit interviews were conducted with a three-point Likert scale questionnaire. Chi-square test was used to assess the association between the overall satisfaction level and socio-demographic characteristics of the patients.

Results: Most, 169(44.9%), of the patients were in the age range of 18-30 years. The majority of the patients were satisfied with the physical environment at the OPD (n=293, 77.9%). The second

highest satisfaction level was with provider interpersonal skills (n=216, 57.5%). However, only 42.3% of the patients were satisfied with the waiting and consultation times measured in this study. The overall patient satisfaction level based on the three domains measured in this study was 61.2%. The results demonstrated a statistically significant association between the overall satisfaction level and patient's age ($\chi^2=17.2038$, $p=.001$), marital status ($\chi^2=3.9209$, $p=.048$), and educational level ($\chi^2=7.5089$, $p=.023$).

Conclusion: Patients' satisfaction with outpatient healthcare services in the hospital could improve if the management of the hospital implemented interventions to minimise patient waiting time and improve the patient-provider relationship. Improved provider-patient ratio and proper filing of patients' medical records could decrease patient waiting time at the hospital. Furthermore, we recommend in-service training and seminars on patient-provider relationship to enrich provider interpersonal skills as this has the potential to upsurge treatment compliance and improve health outcomes of patients.

Keywords: Patient satisfaction; patient perception; quality healthcare; outpatient department; healthcare services; Tamale; Ghana.

1. INTRODUCTION

Patient satisfaction is commonly used as an indicator to measure the quality of healthcare [1]. It embodies the patient's perceived needs, expectations, and experiences of healthcare [2]. Patients may seek care elsewhere when the quality of care does not meet their expectation. Further, a patient's perception of quality of care directly influences his/her compliance with treatment and clinical outcome [3,4]. Both medical and non-medical factors such as hospital comfort, physician's skill and interpersonal communication skills, sufficient drugs, the attitude of hospital staff, access to facilities, waiting time, and the physical environment of the facility affect patient satisfaction and perception of quality of care [2,5,6]. Hence, healthcare that meets all medical needs of a patient may fail to meet the patient's emotional or social needs. On the other hand, healthcare that meets the emotional and social needs of a patient may fail to meet the medical needs of the patient [7]. Thus, in addition to professional competences, patients expect healthcare providers to communicate in a language they understand, act cordially, and show concern, care, and good manners [1]. This is because an exhibition of good interpersonal and communication skills builds an approachable environment within a facility where patients are free to seek clarification from healthcare providers regarding their treatment [6].

In Bangladesh Aldana et al. found that provider's behaviour towards patients, mainly respect and politeness, was the most important predictor of patient satisfaction. It was rated higher than the provider's technical proficiency. Short waiting

time and staff respect for patient privacy during consultation and treatment were also endorsed as powerful predictors of patient satisfaction [7]. Another study in Bangladesh reported a significant association between patient satisfaction and convenient opening hours, facility cleanliness, and privacy. In the study, facility cleanliness and privacy were the most important determinants of patient satisfaction [8]. Additionally, a patient satisfaction survey in Tanzania showed that patients were dissatisfied with clinician's ability to prescribe good drugs, proper prescription of medications, lack of essential drugs, seats, and toilets at OPD, and lack of compassion by OPD staff [3].

Quality of care demands that healthcare professionals pay attention to the needs of patients and use methods that have been tested to be safe, affordable and can reduce deaths, illness, and disability. In Ghana, improving the quality of healthcare at all service delivery points is one of the key objectives of the Ghana Health Service [9]. Evidence suggests that poor quality healthcare leads to loss of lives, low provider self-confidence, and contributes to the poor image of a healthcare facility [9].

The assessment of patient satisfaction and perception of healthcare services has become important because patient perception presents several advantages for the evaluation of the extent to which patient expectations are met [4]. Furthermore, the present-day patient is well educated, has abundant access to information and it is, therefore, imperative to address issues related to patient satisfaction and quality of healthcare if we are ever to meet the expectations of patients in the twenty-first

century [2]. The aim of this study was to assess patients' perceptions and satisfaction with outpatient healthcare services at the Tamale Central Hospital in Northern Ghana. Our study provides useful information to assist the management of the hospital to develop clinical quality enhancement strategies and interventions that will improve the quality of healthcare and patient satisfaction in the hospital.

2. METHODOLOGY

2.1 Study Setting, Design and Population

This cross-sectional study was conducted at the outpatient department (OPD) of Tamale Central Hospital in the Northern Region of Ghana. The hospital is located in the heart of the Tamale Metropolitan Assembly. The Tamale Metropolitan Assembly is the only metropolis in the three Northern Regions namely Upper West, Upper East, and Northern Regions. There are 115 communities in the metropolitan area. Most of the communities lack good road networks, schools, hospitals, and recreational centres [10]. Annually, Tamale Central Hospital attends to about 100, 000 outpatients, 24, 000 inpatients, and 25, 000 pregnant women. All patients visiting the outpatient department of the hospital for healthcare services during the study period constituted the study population. We excluded critically ill patients, patients below 18 years, and patients with impaired mental state.

2.2 Sampling and Data Collection

A sample size of 385 was estimated under the assumption of 50% patient satisfaction with OPD services, 95% confidence interval, 5% margin of error, and a 30% attrition rate. Purposive and convenient sampling methods were used to sample outpatients' right before they exit the outpatient department. Exit interviews were conducted with a three-point Likert scale (agreed, not sure, disagreed) questionnaire on patient perception and satisfaction with provider interpersonal skills (5 items), waiting and consulting time (7 items) and physical environment (4 items). In addition to items on patient perception and satisfaction, we collected information on socio-demographic characteristics such as age, sex, marital status, and educational level. The questionnaire was pretested on 30 outpatients in a facility with similar characteristics as the study hospital prior to actual data collection and amendments made to improve the questionnaire. Furthermore, the internal

consistency of the questionnaire was estimated using Cronbach's alpha coefficient. The Cronbach's alpha coefficient for all the three dimensions of outpatient healthcare services measured was 0.81, indicating acceptable internal consistency. Trained research assistants approached and explained the study to eligible patients or their attendants after they had received healthcare services and were about to exit the outpatient department. Patients or attendants willing to participate in the study were assisted to complete the 16-item questionnaire. Participation was voluntary and consent was obtained from all participants. Patients unwilling to give consent were excluded. For uneducated participants who could not read or understand English language, the questions were asked in a local dialect (mainly Dagbani) and the response recorded by the interviewer. Two health professionals' translated the questionnaire into the local dialect, pre-fieldwork, using the forward translation method. This was observed to be consistent with the original questionnaire during the pre-test. Additionally, all the research assistants were bilingual and native speakers of the local dialect (Dagbani). This was done to ensure consistency in the translation of questions and responses. The principal investigators supervised the data collection process to ensure consistency and completeness of data.

2.3 Ethical Consideration

The Northern Regional Directorate of Ghana Health Service granted approval for the study upon a written request and explanation of the study protocol. In addition, permission was sought from the medical director of Tamale Central Hospital before the commencement of data collection. The purpose of the study was explained to all participants and voluntary consent obtained. Data were not collected on personal identifies. We ensured confidentiality of the data collected.

2.4 Data Management and Analysis

Data analysis was performed using Stata version 14 statistical software. All questionnaires were checked for completeness before entered into Microsoft Excel spreadsheet and imported into Stata software for statistical analysis. Percentages and frequencies were presented for descriptive analysis of patients' socio-demographic characteristics and their perceptions and experiences with outpatient healthcare services. For purposes of the

analysis, 'not sure' and 'disagree' were categorised as 'disagree'. Participants responses were therefore dichotomised as 'agree' and 'disagree'. To estimate patients satisfaction level, each 'agree' response was scored 1 while a 'disagree' response was scored 0. Scores for each of the three dimensions (provider interpersonal skills, waiting and consulting time, and physical environment) were determined and patients overall satisfaction level categorised as "satisfied" and "dissatisfied" based on an 80% cut-off point. Chi-square test was used to assess the association between the overall satisfaction level (dependent variable) and socio-demographic characteristics (age, sex, marital status, education level) of the patients. Statistical significance for the chi-square test was set at $p < .05$.

3. RESULTS

3.1 Socio-demographic Characteristics of Participants

A total of 385 exit interviews were successfully conducted among outpatients. We disqualified nine (9) interviews for not meeting the inclusion criteria (below age 18 years) and analysed data for 376 participants. Table 1 presents the socio-demographic characteristics of the patients.

Most, 169(44.9%), of the patients were in the age range of 18-30 years. Only 11.7% of them were in the age range of 63-80 years. Among the 376 patients, 220(58.5%) were females, 222(59.0%) were married, and 165(43.9%) had no formal education.

Table 1. Socio-demographic characteristics of participants

| Characteristics | Number | Percent |
|------------------------------|--------|---------|
| Age | | |
| 18-27 | 47 | 12.50 |
| 28-37 | 89 | 23.67 |
| 38-47 | 106 | 28.19 |
| 48-57 | 86 | 22.87 |
| 58-67 | 31 | 8.24 |
| 68-77 | 15 | 3.99 |
| 78-80 | 2 | 0.54 |
| Sex | | |
| Male | 156 | 41.49 |
| Female | 220 | 58.51 |
| Marital status | | |
| Married | 222 | 59.04 |
| Unmarried ^a | 154 | 40.96 |
| Education | | |
| No formal education | 165 | 43.88 |
| Primary/JHS | 62 | 16.49 |
| Senior High School and above | 149 | 39.63 |

^a single, divorce, widow, cohabiting

Table 2. Patients' perceptions of and experience with OPD healthcare services

| Variables | Agree n(%) | Disagree n(%) |
|--|------------|---------------|
| Provider interpersonal skills | | |
| The records staff were friendly | 208(55.32) | 168(44.68) |
| The nurses (who took my vital signs) were friendly and had patience to listen to my complaints | 235(62.50) | 141(37.50) |
| The doctor paid enough attention to my complaints during the consultation | 261(69.41) | 115(30.59) |
| I felt I was in good in hands | 273(72.61) | 103(27.39) |
| The pharmacist paid attention when serving me the medication | 252(67.02) | 124(32.98) |
| Waiting and consulting time | | |
| I spent little time taking my folder | 195(51.86) | 181(48.14) |
| I spent little time waiting to check my vital signs | 215(57.18) | 161(42.82) |
| Spent little time waiting to see the doctor | 201(53.46) | 175(46.54) |
| Spent quite enough time with the doctor | 289(76.86) | 87(23.14) |
| Enough time was spent on physical examination | 223(59.31) | 153(40.69) |
| I was told my diagnosis | 172(45.74) | 204(54.26) |
| I spent little time waiting for my drugs | 186(49.47) | 190(50.53) |
| Physical environment | | |
| It is easy to locate the OPD | 326(86.70) | 50(13.30) |
| The waiting room is comfortable | 268(71.28) | 108(28.72) |
| The consulting room was comfortable and clean | 327(86.97) | 49(13.03) |
| Is the general environment clean | 284(75.53) | 92(24.47) |

3.2 Patients' Perceptions and Experience with OPD Healthcare Services

Patients' perceptions and experience with OPD healthcare services are presented in Table 2. Among the five items that measured healthcare providers interpersonal skills, friendliness of records staff (n=208, 55.3%) was the least rated. Nearly two-thirds of the patients said nurses who checked their vital signs (temperature, pulse, respiration, and blood pressure) were friendly (n=235, 62.5%) and that pharmacist paid enough attention to them when dispensing drugs (n=252, 67.0%). Most of the patients felt they were safe (n=273, 72.6%) and that the attending doctor paid enough attention to their complaints during consultation (n=261, 69.4%). As shown in Table 2, only a little over half of the patients indicated they spent little time to retrieve or obtain folders at the OPD (n=195, 51.9%), to have their vital signs checked (n=215, 57.2%) and to see a doctor (n=201, 53.5%). Two hundred and twenty-three (59.3%) patients believed doctors dedicated enough time during physical examination. However, more than half of the participants indicated they were not informed of

their diagnosis (n=204, 54.3%) and that they spent more time than necessary waiting for drugs at the pharmacy (n=190, 50.5%). More than four-fifths of the patients agreed it was easy to locate the OPD within the hospital (n=326, 86.7%) and that the consulting room was comfortable and clean (n=327, 86.9%). Of the 376 participants, 268(71.3%) said the waiting room of the hospital was comfortable and approximately three-fourths, 284(75.5%), of the participants agreed the general environment of the hospital was clean.

3.3 Patients' Level of Satisfaction with Outpatient Healthcare Services

Table 3 presents a summary of patients overall satisfaction with provider interpersonal skills, waiting and consulting time, and the physical environment of the hospital. Most of the patients were satisfied with the physical environment at the OPD (n=293, 77.9%). The second highest satisfaction level was with provider interpersonal skills (n=216, 57.5%). However, only 42.3%, of the patients were satisfied with the waiting and consulting times measured in this study. The

Table 3. Patients' overall satisfaction level of outpatient healthcare services

| Categories | Satisfied | Dissatisfied |
|-------------------------------|------------|--------------|
| | n(%) | n(%) |
| Provider interpersonal skills | 216(57.45) | 160(42.55) |
| Waiting and consulting time | 159(42.29) | 217(57.71) |
| Physical environment | 293(77.93) | 83(22.07) |
| Overall satisfaction | 230(61.17) | 146(38.83) |

Table 4. Association of patients' overall satisfaction level and socio-demographic characteristics

| Characteristics | Satisfied n(%) | Dissatisfied n(%) | X ² | P value |
|------------------------------|-------------------|----------------------|----------------|---------|
| Age | | | | |
| 18-30 | 120(71.01) | 49(28.99) | 17.2038 | 0.001 |
| 31-46 | 53(52.48) | 48(47.52) | | |
| 47-62 | 28(45.16) | 34(54.84) | | |
| 63-80 | 29(65.91) | 15(34.09) | | |
| Sex | | | | |
| Male | 91(58.33) | 65(41.67) | 0.9034 | 0.342 |
| Female | 139(63.18) | 81(36.82) | | |
| Marital status | | | | |
| Married | 145(65.32) | 77(34.68) | 3.9209 | 0.048 |
| Not married | 85(55.19) | 69(44.81) | | |
| Education level | | | | |
| No formal education | 110(66.67) | 55(33.33) | 7.5089 | 0.023 |
| Primary/JHS | 29(46.77) | 33(53.23) | | |
| Senior High School and above | 91(61.07) | 58(38.93) | | |

overall satisfaction based on the three domains measured in this study is presented in Table 3. Of the 376 patients, 230(61.2%) were satisfied with the outpatient healthcare services provided by the hospital while 146(38.8%) were dissatisfied. As illustrated in Table 4, there was a statistically significant association between the overall satisfaction level and patient's age ($\chi^2=17.2038$, $p=.001$), marital status ($\chi^2=3.9209$, $p=.048$), and educational level ($\chi^2=7.5089$, $p=.023$).

4. DISCUSSION

Our study measured patient satisfaction on three major domains (provider interpersonal skills, waiting and consulting time, and physical environment) of outpatient healthcare services in a secondary level healthcare facility to evaluate the extent to which patient expectations were met. Patient expectations are healthcare experiences a patient desires, wish to receive, feel important and entitled to when seeking care [11,12]. Patient satisfaction is a useful measure of the quality of care because it provides evidence on the provider's success in meeting patient healthcare expectations [11]. We found that the overall patient satisfaction based on the three domains was relatively low when compared to other patient satisfaction surveys elsewhere [8,13–16]. However, the result is consistent with the findings of Khamis and Njau in Tanzania [3]. The dissimilarities between our findings and that of previous studies may be attributed to differences in participants educational level, their expectations, and the study design employed. Furthermore, most of the previous studies were conducted either in a clinic, specialised hospital, or in a teaching hospital where provider interpersonal skills, waiting and consulting time, and the physical environment may be different from what exists in a secondary level healthcare facility. Nonetheless, the finding indicates that the healthcare services provided at the hospital are unable to meet the expectations of patients seeking care. Studies elsewhere found that dissatisfied patients are likely to abandon prescribed treatment protocol, seek care elsewhere, and are unlikely to refer others to the hospital [3,4].

Studies have shown that patients derive their first impression of a healthcare facility through its physical environment and appearance. As a result, the healthcare environment of a hospital has an enormous influence on patient satisfaction and perception of quality of care [6].

Of the three domains we measured, the physical environment domain recorded the highest overall satisfaction score. Majority of the patients indicated the OPD could be easily located in the hospital without much difficulty. The participants were satisfied with the state of comfort and cleanliness of consulting rooms, waiting rooms, and the general environment of the hospital. A previous survey in Nigeria [17] and Bangladesh [8] reported similar findings when outpatients were interviewed. As stated in Becker and Douglass study, cleanliness, comfort, and attractiveness of the physical environment of a hospital could have a positive impact on a patient's perception of waiting time and quality of healthcare [18]. This may explain why the physical environment domain contributed immensely to the overall patient satisfaction level in this study. Our findings revealed that patient's age, marital status, and education level were significantly associated with patient satisfaction, which is in line with findings of previous studies in Spain [19] and Uganda [20].

Many patient satisfaction studies have demonstrated that the interpersonal skills of healthcare providers and the quality of patient-provider communication have an influence on patient satisfaction and perception of quality of healthcare delivery. In Bangladesh Aldana et al. found that provider's interpersonal skills and attitude towards patients were the most important predictor of patient satisfaction. It was rated higher than the provider's technical proficiency [7]. In this study, among the five items that measured healthcare providers' interpersonal skills, friendliness of records staff was the least rated. Overall, only a little over half of the patients were satisfied with the interpersonal skills of healthcare providers. This could negatively influence their compliance with treatment and treatment outcome as suggested by Khamis et al. and Goyal et al. [3,4].

Atinga et al. [6] observed that the length of time patients spend receiving care greatly contributes to patient satisfaction with the quality of service provided in a facility. Our findings revealed that waiting and consultation times were a major source of dissatisfaction among the patients as this domain recorded the least satisfaction score. The results show that half of the patients in this study were dissatisfied with the time spent waiting to collect prescribed drugs and only 52% of the participants were satisfied with the time spent waiting to see a doctor. These findings may be attributed to an inadequate number of

physicians, nurses, and other healthcare professionals to provide timely care to an overwhelming number of patients, as is the case in most developing countries including Ghana. A patient satisfaction survey in Nigeria reported similar findings [15]. In 2016, the Ghana health Service reported a deficiency of doctors and nurses in the Northern Region of Ghana, where we conducted the study. The report shows that the doctor to population ratio in the region is much more than what is recommended by the World Health Organisation [21]. Furthermore, healthcare facilities in most developing countries do not have effective patient scheduling systems. Patients who report to the outpatient clinics are usually walk-ins. Hence, most patients arrive at the outpatient clinics within the same time resulting in long patient waiting times [12]. These realities further provide probable reasons for the poor satisfaction level recorded in the waiting and consulting time domain in this study.

5. CONCLUSION

Our study demonstrated a relatively suboptimal overall patient satisfaction level. However, a higher satisfaction level was recorded in the physical environment domain. Our findings revealed that waiting and consultation times were the major source of dissatisfaction among the patients. Friendliness of records staff was the least rated service in the provider interpersonal skills domain. We found a significant association between patients overall satisfaction level and age, marital status, and education level. Patients' satisfaction with outpatient healthcare services in the hospital could improve if management of the hospital implemented interventions to minimise patient waiting time and improve patient-provider relationship. Improved provider-patient ratio and proper filing of patients medical records could decrease patient waiting time in the hospital. Furthermore, we recommend in-service training and seminars on patient-provider relationship to enrich provider interpersonal skills as this have the potential to upsurge treatment compliance and improve health outcomes of patients.

CONSENT

The purpose of the study was explained to all participants and voluntary consent obtained. Data were not collected on personal identifies. We ensured confidentiality of the data collected.

ETHICAL CONSIDERATION

The Northern Regional Directorate of Ghana Health Service granted approval for the study

upon a written request and explanation of the study protocol. In addition, permission was sought from the medical director of Tamale Central Hospital before the commencement of data collection.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Prakash B. Patient satisfaction. *J Cutan Aesthet Surg*. 2010;3(3):151–6.
2. Mukhtar F, Anjum A, Bajwa M, Shahzad S. Patient satisfaction. *Prof Med J [Internet]*. 2013;20(6):973–80. Available:http://applications.emro.who.int/i_memrf/Professional_Med_J_Q/Professional_I_Med_J_Q_2013_20_6_973_980.pdf
3. Khamis K, Njau B. Patients' level of satisfaction on quality of health care at Mwananyamala hospital in Dar es Salaam, Tanzania. *BMC Health Serv Res*. 2014; 14(400):1–8.
4. Goyal P, Kumar D, Dixit S, Srivastav S, Singh A, Goyal P, et al. Essential criteria for quality OPD services as perceived by patients in a tertiary care hospital in Faridabad City. *Int J Res Med Sci*. 2016; 4(2):441–5.
5. Bakar C, Seval Akgün H, Al Assaf AF. The role of expectations in patient assessments of hospital care: An example from a university hospital network, Turkey. *Int J Health Care Qual Assur*. 2008;21(4):343–55.
6. Atinga RA, Abekah-Nkrumah G, Domfeh KA. Managing healthcare quality in Ghana: A necessity of patient satisfaction. *Int J Health Care Qual Assur*. 2011;24(7):548–63.
7. Aldana JM, Piechulek H, Al-sabir A. Client satisfaction and quality of health care in rural Bangladesh. *Bull World Health Organ*. 2001;79:512–7.
8. Adhikary G, Shawon SR, Ali W, Shamsuzzaman M, Ahmed S, Shackelford KA, et al. Factors influencing patients' satisfaction at different levels of health facilities in Bangladesh: Results from patient exit interviews. *PLoS One*. 2018; 5(e0196643):1–13.
9. Ghana Health Service. Healthcare quality assurance manual for sub-districts. Ghana; 2004.

10. Ghana Statistical Services. District Analytic report: Tamale metropolis [Internet]. District Analytical Report: Tamale Metropolis. Ghana; 2014. Available:[http://www.statsghana.gov.gh/docfiles/2010_District_Report/Northern/Tamale Metropolitan.pdf](http://www.statsghana.gov.gh/docfiles/2010_District_Report/Northern/Tamale_Metropolitan.pdf)
11. Williams B. Patient satisfaction: A valid concept? Soc Sci Med. 1994;38(4):509–16.
12. Moosa S, Luiz J, Carmichael T, Peersman W, Derese A. Insights of private general practitioners in group practice on the introduction of National Health Insurance in South Africa. African J Prim Heal Care Fam Med [Internet]. 2016;8(1):2071–936. Available:<http://www.phcfm.org>
13. Mandokhail AK. Patient satisfaction towards Out Patient Department (OPD) services of medicine department in banphaeo community hospital samut sakhon province, Thailand. J Public Heal Dev. 2007;5(3):97–105.
14. Assefa F, Mosse A, Michael YH. Assessment of clients' satisfaction with health service deliveries at Jimma University Specialized Hospital. 102 Ethiop J Heal Sci. 2011;21(2):101–9.
15. Abdulsalam A, Khan HTA. Hospital services for ill patients in the Geopolitical Zone, Nigeria: Patient's Waiting Time and Level of Satisfaction. Illness, Cris Loss; 2017.
16. Amerion A, H AA, M MA, Ebrahimnia M, Sanaianasab H. Assessment of patient satisfaction and its related factors with outpatient services of military hospital clinics in Iran. Wulfenia Journa. 2012; 19(8):74–83.
17. Ogunnowo BE, Olufunlayo TF, Sule SS. Client perception of service quality at the outpatient clinics of a general hospital in Lagos, Nigeria. Pan Afr Med J. 2015;22: 1–8.
18. Becker F, Douglass S. The ecology of the patient visit: Physical attractiveness, waiting times, and perceived quality of care. J Ambul Care Manage. 2008;31(2): 128–41.
19. Quintana JM, González N, Bilbao A, Aizpuru F, Escobar A, Esteban C, et al. Predictors of patient satisfaction with hospital health care. BMC Health Serv Res. 2006;6:1–9.
20. Nabbuye-Sekandi J, Makumbi FE, Kasangaki A, Kizza IB, Tugumisirize J, Nshimye E, et al. Patient satisfaction with services in outpatient clinics at Mulago hospital, Uganda. Int J Qual Heal Care [Internet]. 2011;23(5):516–23. Available:<http://intqhc.oxfordjournals.org/content/intqhc/23/5/516.full.pdf>, http://jhpr.ir/article_43345.html
21. Ghana Health Service. The Health Sector in Ghana: Facts and Figures 2017 [Internet]. Ghana; 2017. Available:http://ghanahealthservice.org/downloads/FACTS+FIGURES_2017.pdf

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