Assessment of clients satisfaction with outpatient services at Yekatit 12 Hospital Medical College, Addis Ababa, Ethiopia

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Abstract

Objective: This study aimed at assessing clients' satisfaction and associated factors among adults. A cross sectional facility based study was conducted on 420 clients of Yekatit 12 Hospital Medical College from 1 June 2016 to 1 July 2016. Data was entered, cleaned, and analyzed using SPSS statistical package. Data was analyzed using a multivariable logistic regression model to find out the most significant predictors for clients satisfaction with outpatient services at Yekatit 12 Hospital Medical College.

Results: This study showed that the overall clients' satisfaction level towards out-patient health service at Yekatit 12 Hospital Medical College was 47% at 95% CI (42.5, 51.7%). The most frequently identified problems were: lack of clean toilet in nearby the waiting areas, lack of waiting area particularly at pharmacy, inadequate furniture like chair, lack of adequate drugs and supplies, lack of privacy at the examination room, lack of direction signs, and poor communication between clients and health service providers. In conclusion the overall satisfaction level of the patients is low, so this demands the Hospital to take further action on the identified problems to improve the services delivered to the patients.

Keywords: Patient satisfaction, Outpatient, Yekatit 12 Hospital Medical College
health services from 1 June 2016 to 1 July 2016 were the source population and clients coming to the outpatient departments during the study period were selected using the systematic random sampling technique was the study population. The exclusion criteria for this study were; the very seriously ill clients who did not have somebody to accompany them because of the difficulty of interviewing such cases (getting the consent, lack of tolerance of the pain or illness and etc.), and clients coming for the second time during the study period and children who are under 15 who are alone. Quantitative approaches were applied in the study. The sample size was 423 which were determined using one population proportion formula. A systematic random sampling method using patients’ registration number as a sampling frame was employed to select respondents (see Additional file 2).

To collect relevant data, structured questionnaire was developed through reviewing related literature for the study [6–9]. Then, the validity of the questionnaire was tested after translating in to Amharic language. The lexical equivalence of questionnaire was examined after back translation. Content validity was established by a panel of experts from public health, community medicine, pharmacy, laboratory technician, nursing, epidemiology, biostatistics, and health education. The final version of the questionnaire had a good indicator for reliability (as indicated by Alpha Cronbach test value of 0.809) (see Additional file 3).

The dependent variable of this study was overall clients’ satisfaction. Out-patient service satisfaction is defined as meeting the perceived needs and the expectations of the client in relation to factors related to the health care provider and amenities. In order to measure the overall clients satisfaction, respondents were asked eight questions with likert five point scale (e.g. I am satisfied with overall cleanliness of the hospital compound) to describe their level of agreement in a five scale response. The 5-point liker scale response options, scored from 1 to 5, were 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree. Subscale scores were obtained by summing item scores and dividing by the total number of items. If it was above or equal to the average, it would be indicative for good satisfaction.

Data were collected by literate and trained data collectors who were health professionals who are not working in the study site for 30 days with an average 14 exit interviews per day conducted in six confidential rooms using a structured and pre-tested questionnaire (see Additional file 3).

Binary logistic regression analysis was carried out to see the association between each independent variable with the outcome variable. Then, variables that showed significant associations at P-value of 0.2 was included in a single model and multiple logistic regressions were performed to identify the most significant predictors. The 95% CI and a P-value of 0.05 were used to assess the degree of statistical significance.

Results
Socio-demographic characteristics of the participants
Among the total samples (n = 423) 420 adult patients’ were interviewed, giving a response rate of 99.3%.

Out of the total study subjects, 273 (65.5%) were females. Two hundred fifteen (51.2%) of the respondents were between the age group of 35–54 years. The mean age of the respondents was 39.8+ (SD) (11.4) years, and 302 (71.9%) of them were married. Concerning the religion and ethnicity of the respondents, the majority 341 (81.2%) were orthodox and 235 (56%) were Amhara respectively (Table 1).

Outpatient service related characteristics of the participants
One hundred sixty three (38.6%) of the participants were satisfied with the location of each service area in the hospital. Respondents were asked about their level of satisfaction regarding the availability of enough waiting chairs and the spaciousness, brightness and airiness of the waiting room, only 80 (19%) were satisfied. Concerning the toilet room out of the total 420 respondents only 355 (84.5%) clients visited the toilet, of those only 88 (21%) were satisfied with cleanliness and accessibility of the toilet.

One hundred thirty nine (33.1%) of the participants were satisfied with the availability of drugs and supplies. One hundred thirty one (31.2%) of the respondents were satisfied with the cares given to assure privacy at all service delivery points. Concerning the interaction with the health care providers and supportive staffs, about 163 (38.8%) of the participants were satisfied with interaction they had with doctors/health officers at the outpatient department.

Concerning interaction with nurses, 182 (43.3%) of the respondents were satisfied. Furthermore, from the total 358 participants who received laboratory service, 120 (33.5%) of them were satisfied with the interaction of the laboratory staffs respectively. One hundred sixty six (39.5%), and 71 (19.9%) of the respondents were satisfied with the communication of the pharmacy staffs and card registration staffs. Generally, this study revealed that 197 (47%) of the respondents were satisfied with the overall service provided in the outpatient department with median value 33, mean value of 32.2 and standard deviation of ±4.1 (Table 2).
Association between the level of satisfaction and selected variables

Binary logistic regression was conducted using bi-variate analysis for socio-demographic variables, and outpatient service related variables. Those variables with P-values less than 0.2 at bi-variate analysis were included in multivariable analysis. In multivariable analysis, factors that remained statistically significant with patient satisfaction were availability of direction indicators (AOR 1.2, 95% CI 1.01–2.43), privacy
respected during consultation (AOR 2.9, 95% CI 2.33, 3.76), cleanliness of the toilet (AOR 0.79, 95% CI 0.43, 0.99), availability of prescribed drugs in hospital pharmacy (AOR 1.9, 95% CI 1.12–2.88), and interaction with registration room workers (AOR 5.3, 95% CI 2.68–5.39 (Table 3).

Table 3: Association patients level of satisfaction with the selected variables in outpatient department of Yekatit 12 hospital medical colleges Addis Ababa, June 2016

| Variables                        | Level of satisfaction | Crude OR (95% CI) | Adjusted OR (95% CI) |
|----------------------------------|-----------------------|-------------------|----------------------|
|                                  | Dissatisfied          | Satisfied         |                      |
| Sex                              |                       |                   |                      |
| Male                             | 84                    | 139               | 0.8 (0.52, 1.17)*    | 1.2 (0.78, 1.83) |
| Female                           | 63                    | 134               | 1                    | 1                   |
| Age                              |                       |                   |                      |
| ≤ 34                             | 77                    | 66                | 0.9 (0.50, 1.66)     | 0.2 (0.07, 0.56)    |
| 35–54                            | 114                   | 101               | 0.9 (0.54, 1.66)     | 1.2 (0.45, 3.10)    |
| ≥ 55                             | 32                    | 30                | 1                    | 1                   |
| Family monthly income            |                       |                   |                      |
| < 1500                           | 205                   | 144               | 0.9 (0.58, 1.27)     |                      |
| ≥ 1500                           | 88                    | 85                | 1                    |                      |
| Payment status                   |                       |                   |                      |
| Paying                           | 144                   | 127               | 1.9 (0.78, 4.49)*    | 0.4 (0.18, 1.11)    |
| Free                             | 62                    | 62                | 2.1 (0.85, 5.39)*    | 0.4 (0.14, 1.01)    |
| Credit                           | 17                    | 8                 | 1                    | 1                   |
| Sign and direction indicators were available to ease ways | | | | |
| Yes                              | 106                   | 57                | 0.7 (0.11, 0.96)*    | 1.2 (1.01, 2.43)**  |
| No                               | 202                   | 55                | 1                    |                      |
| Privacy maintained during consultation | | | | |
| Yes                              | 31                    | 100               | 2.6 (2.11, 3.32)*    | 2.9 (2.33, 3.76)**  |
| No                               | 201                   | 88                | 1                    |                      |
| Cleanliness of the toilet        |                       |                   |                      |
| Yes                              | 39                    | 49                | 0.59 (0.37, 0.97)    | 0.79 (0.43, 0.99)**  |
| No                               | 300                   | 32                | 1                    | 1                   |
| Have got all ordered of prescribed drugs | | | | |
| Yes                              | 49                    | 90                | 1.3 (1.12, 1.89)*    | 1.9 (1.12, 2.88)**  |
| No                               | 230                   | 52                | 1                    | 1                   |
| Interaction with Dr/HO           |                       |                   |                      |
| Bad                              | 74                    | 183               | 1.6 (1.02, 3.93)*    | 2.8 (1.74, 4.96)    |
| Good                             | 55                    | 108               | 1                    | 1                   |
| Interaction with nurse           |                       |                   |                      |
| Bad                              | 145                   | 93                | 0.5 (0.32, 0.71)*    | 1.9 (1.16, 3.06)    |
| Good                             | 78                    | 104               | 1                    | 1                   |
| Interaction with lab             |                       |                   |                      |
| Bad interaction                  | 106                   | 87                | 0.8 (0.52, 1.20)*    | 7 (2.71, 18.11)     |
| Good interaction                 | 81                    | 84                | 1                    | 1                   |
| Interaction with pharmacy        |                       |                   |                      |
| Bad                              | 201                   | 53                | 0.8 (0.51, 1.11)*    | 0.6 (0.34, 0.95)    |
| Good                             | 81                    | 85                | 1                    | 1                   |
| Interaction with registration    |                       |                   |                      |
| Bad                              | 205                   | 144               | 0.2 (0.13, 0.42)*    | 5.3 (2.68, 5.39)**  |
| Good                             | 18                    | 53                | 1                    | 1                   |

NB * statistically significant as the P value is < 0.2 for crude OR  
** Statistically significant as P value is < 0.05 for adjusted OR
Discussion
This study showed that the overall satisfaction level of the outpatient services provided at Yekatit 12 Hospital Medical College (Y12HMC) was 47% at 95% CI (42.5, 51.7%). This result is similar with the study done in Molango Hospital Uganda and Wolita Sodo University Teaching Hospital [6, 10]. The present study suggested that overall satisfaction level report is low compared to the report of the studies conducted in, Bahirdar Felege Hiwot Referral Hospital, and Hawassa University Teaching Hospital, which showed 52.8 and 80.1% respectively [3, 10, 11]. Concerning the privacy, almost 88% of the participants did not have private consultation.

Furthermore, the regression analysis revealed that private consultation increased satisfaction by 97.1% at 95% CI 2.9 (2.33, 3.76). This is similar with a study conducted in the University of Gondar Referral and Teaching Hospital, Ethiopia [12]. However, this is extremely higher compared with other studies conducted in Felegehiwot Referral Hospital, North West Ethiopia (26%) [11], Hawasa University Teaching Hospital 18.6% [3], Wolaita-Sodo University Teaching Hospital, Southern Ethiopia 20% [10]. This difference might be due to the difference in the study areas.

According to the study conducted in India, easy accessibility and a good signage system for the OPD services provide a good image for the hospital [7]. However the researchers revealed that there was a statistically significant association between the absence and presence of direction sign against client satisfaction. The presence of signing direction increased satisfaction by 98.8%. This finding was consistent with the previous study conducted in Bahirdar Ethiopia in which 74% of the participants were dissatisfied due to the absence of signing direction [11].

Pertaining to the cleanliness of the toilet, availability of clean toilet increased patient satisfaction by 79% at 95% CI 0.79 (0.43, 0.99). This is similar with the study done in Wolita-Sodo University Teaching Hospital [10], and the Felege-Hiwot Hospital Bahirdar, Ethiopia in which 62% of the participants were dissatisfied due to luck of clean toilet [11].

Regarding the availability of drugs and supplies in the hospital, there was a significant association between the availability of drugs and overall level of satisfaction (AOR 1.9, 95% CI 1.12–2.88). This is similar with the study conducted at private wing of Felegehiwot Hospital, Bahirdar and Hawassa University Teaching Hospital [3, 11].

Conclusion
The overall client satisfaction in Yekatit 12 Hospital Medical College was 47% at 95% CI (42.5, 51.7%) which was low as compared to different studies in Ethiopia and outside Ethiopia. High proportions of patients were dissatisfied with patient satisfaction measuring items. In order to gain better views of the field and produce more meaningful result, further study should be conducted with broader scope using comparative studies.

Limitation
The finding of this study is interpreted in light of several limitations. The cross-sectional design gives only a snapshot of events. Social desirability bias is also likely in this study as the respondents were interviewed in the compound of the health facility.

Additional files

Additional file 1. Population.
Additional file 2. Sample size determination and sample procedure.
Additional file 3. Data collection.

Abbreviation
Y12HMC: Yekatit 12 Hospital Medical College.

Authors' contributions
TTB involved in designing of the study, data collection, data analysis, drafting and critically reviewing the manuscript. Likewise, GEB, YSY and TZL involved in designing of the study, analysis of the data and critically reviewing the manuscript. All authors read and approved the final manuscript.

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Acknowledgements
The authors would like to thank Yekatit 12 Hospital Medical College for funding this study. The researchers would also sincerely thank the study participants for their participation in the study.

Competing interests
The authors declare that they have no competing interests.

Availability of data and materials
The finding of this study is generated from the data collected and analyzed based on the stated methods and materials. All the data are already found in the manuscript and there are additional files. See the additional files.

Consent for publication
Consent to publish is not applicable for this manuscript because there is no individual data details like images or videos.

Ethics approval and consent to participate
The study protocol was performed in accordance with the ethics principles. Ethical approval was obtained from the institutional review board of Yekatit 12 Hospital Medical College. The authors obtained written informed consent from all participants.

Funding
This study was funded by Yekatit 12 Hospital Medical College, Addis Ababa, Ethiopia.
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Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Received: 20 October 2017   Accepted: 13 July 2018
Published online: 27 July 2018

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