Satisfaction and associated factors among psychiatry service users at Amanuel mental specialized hospital. Addis Ababa, Ethiopia

Esayas Kibrom¹, Zebiba Naser¹, Merga Seyoum¹, Atakilit Mengesha¹, Kemeria Adem¹, Deribe Bekele Dechasa²* and Henock Asfaw²*

¹School of Nursing and Midwifery, College of Health and Medical Science, Haramaya University, Harar, Ethiopia

Background: Patient service satisfaction is the central point for the health system. Worldwide, around 450 million people suffer from mental and behavioral disorders. Clients who are dissatisfied with the service will miss appointments, abandon the treatment plan, and eventually relapse from the illness. Despite improved access to health services, the satisfaction from health institution services was decreasing from time to time and there is little information on health service consumer satisfaction.

Objective: To assess the satisfaction and associated factors among psychiatric service consumers at Amanuel Mental Specialized Hospital, Addis Ababa, Ethiopia, 2021/2022.

Methods and materials: An institutional-based cross-sectional study was conducted among 420 psychiatric service users from December 15 to January 16, 2021/2022. Systematic random sampling was used. A face-face interview technique and chart review were used to collect the data and a standard and validated tool called the mental health service satisfaction scale (MHSSS) was used to measure satisfaction. The collected data was entered into EPI info version 7 and exported to SPSS version 22 for analysis. The binary logistic regression model was used to analyze the data and bivariable and multivariable logistic regression analyses were conducted to identify associated factors with satisfaction. The level of significance was reported at P < 0.05.

Results: The study showed that the magnitude of patient satisfaction was 63.3% [95% CI 58.3–67.9%]. Sex (AOR = 1.7, 95% CI (1.072–2.88)), educational status (AOR 4.2, 95% CI 1.64–1.8), residency (AOR = 1.8, 95% CI (1.098–3.19)), distance from the hospital (AOR 0.56, (0.34–0.93)) were significantly associated with patient satisfaction at p < 0.05.

Conclusion: The magnitude of patient satisfaction was high. The study showed that Sex, educational status, residence, and distance from the hospital were significantly associated with satisfaction. Prioritizing care for female patients and those coming from a distance is necessary. More ever, it is preferable to
Introduction

Patient satisfaction is the central point of measuring the health system (1, 2). It can be defined as the client's level of gratification to a different psychiatric service offered by the health care system during health facility visits. Psychiatry patients evaluate the service providers with their subjective views on finding solutions to the problems they encounter. Service users compare the service with their experience and presumed expectations and consumer satisfaction is playing a huge and important role in determining service quality reforms. However, finding an accepted meaning for quality of service is difficult to find (3). One of the desired results for mental health providers is patient satisfaction. It has been a major contributor to results in the measurement and enhancement of the quality of care for the mental health system (4).

According to WHO reports, the burden of mental disorders has risen significantly over the past decade and regular assessment of service satisfaction is a key element in detecting problems that arise in day-to-day work that helps the health care facility find a system that can provide quality of service for the clients, and it is the cornerstone of the health care system. More than 450 million people suffer from behavioral and mental disorders worldwide annually, but there is not enough attention given in developing countries (5). Giving attention to mental illness and providing quality service is very necessary to address the population's problems (6).

Those who are dissatisfied with the service become noncompliant with the treatment, miss the appointment days, leave the treatment against medical advice, and it increases the relapse rate of the illness, so those individuals who face these problems are going to be unhealthy, unproductive, and could be a burden to the family, to the community, and the country (7).

Utilizing available resources effectively for service satisfaction can be a bridge to close the gap since the mental health sector lacks sufficient fundraising to maintain the system (8). The psychiatric patients' perception of the quality of service has an important role in providing quality care to the clients. Health facilities can retain their clients to recover from illness and improve the wellbeing of clients in the existing health care system by providing quality service (9).

Providing quality service should be a health facility goal that can be exercised and that can be achieved to the result of satisfying clients' needs, maintaining healthy individuals' health, and providing the country with active and productive people.

In recent decades, addressing patient satisfaction with the service has gained more concern and acceptance. Studies have also been carried out, and the required accurate and validated tools have been developed. The quality of service is influenced by different factors related to the clinical service's patient satisfaction, such as drug availability, service cost, neatness of the compound, quality of service, and service opening hours. However, quality of service can be provided by good communication skills with the clients that enable effective management as well as address clients' problems in getting the service to enable the service provider to give a convenient solution for patient satisfaction (10).

Additionally, because patient demands and attitudes toward services might fluctuate, it will be crucial for researchers to use this study's findings as a baseline for future assessments of this study area and other patient satisfaction-related study areas.

Methods and materials

Study area and period

This study was conducted at Amanuel Mental Specialized Hospital in Addis Ababa. It is one of the oldest hospitals, established in 1930 E.C during the Ethio-Italian war, and it is the only mental hospital in Ethiopia. It is located in the western part of Addis Ababa in Addis Ketema Sub-city, kebele 08. The hospital is working on increasing the efficiency and effectiveness of the services to make itself the center of mental health care excellence by providing core mental health clinical services, conducting research and training, and other administrative services. An average of 9,662 people visited outpatient departments each month, and 370 inpatients were available. The hospital has 300 beds that serve all types of mental disorders. The hospital has 17 OPDs. The study was conducted from December 15 to January 16, 2021/2022.

Abbreviations: AOR, Adjusted Odds Ratio; CI, Confidence Interval; CSQ, Client Satisfaction Questionnaire; MHSSS, Mental Health Service Satisfaction Scale; OPD, Out Patient Department; OR, Odds Ratio; WHO, World Health Organization.
Study design and population

An institutional-based quantitative cross-sectional study design was employed. All patients who were getting treatment and who were in remission at Amanuel Mental specialized hospital and who were available at the time of data collection and whose age was 18 years or older were included. Those who were severely ill and unable to communicate were excluded from the study.

Sample size determination and sampling procedure

The optimum number of samples required for the study was estimated using a single population proportion formula considering the following assumptions: At a margin of error of 5%, at 95% CI, the magnitude of satisfaction was taken from a study done in St Paul’s Hospital Millennium Medical College in Ethiopia, which was 50.3% (11), and the non-response rate was 10%. The final calculated sample size was 422. The sample for the second specific objective is determined by using the Epi Info version 7 by considering the factors that were significantly associated with satisfaction at \( p = 0.05 \), a two-sided confidence level of 95% and margin of error of 5%, and power=80 percent, and a ratio of exposed to unexposed of 1:1. To get enough sample size we used the factor that gave us a large sample size and a ratio of exposed to unexposed of 1:1. To get enough sample size we used the factor that gave us a large sample size and accordingly sample size was 330 and 10% non-response rate was added. By adding 10% to 330 it gave us 363 which is <422. Since 422 is larger than 363, thus the final sample size was 422.

A stratified sampling technique was used to select samples from inpatient and outpatient departments. Then systematic random sampling was used to select sampling units from each ward and outpatient department. The selection interval was that participants selected every 23rd interval. The first individual was selected by the lottery method.

Data collection tools and procedures

Data on psychiatric patient satisfaction was collected through interviews using a standardized client satisfaction questionnaire (CSQ-8), developed for use in mental health programs, where the tools have eight individual items and the rank order is the same for all questions, with four options ranging from 1 = “Poor, 2 = Fair, 3 = Good and 4 = Excellent.” In our study, poor and fair are regarded as dissatisfied, and good and excellent are regarded as satisfied. Information on the clinical factors was collected by reviewing patient’s chart. Sociodemographic and other variables were assessed using structured questionnaires developed from different studies in the literature (12). Social support was also measured by the Oslo Social Support Scale (OSSS)—it is a three-item scale with a Cronbach’s alpha of 0.75 and has a range value of 3–14, further categorized as follows: poor support (3–8), moderate support (9–11) and strong support (12–14) (13).

Data processing and analysis

The data was entered by Epi-data version 3.1 to minimize data entry errors and then exported to SPSS version 22.00 for analysis. Descriptive statistics such as text, percentages, graphs, and tables for categorical data and calculated mean and standard deviation for continuous variables were done. All variables that had a \( P \)-Value of < 0.2 in bivariate analysis were entered into multivariate analysis. The strength of the association was determined by using an odds ratio with 95% CI and a \( P \)-value <0.05 in multivariate analysis was considered a statistically significant association. The logistic regression model’s fitness was tested using Hosmer and Lemeshow, and the result was a fit of 0.75. The multicollinearity was checked by the variance inflation factor and the result was 1.2.

Operational definitions

The client satisfaction questionnaire (CSQ-8), is eight individual items tool used to assess psychiatry patient satisfaction it has four response options ranging from 1 = “Poor, 2 = Fair, 3 = Good, and 4 = Excellent.” Poor and fair are regarded as dissatisfied, and good and excellent are regarded as satisfied. The score ranges from 8 to 32 a score <16 was regarded as dissatisfied and 16 and above was regarded as satisfied (14). Social support was also measured by the OSSS and it is a three-item scale and has a range value of 3–14, further categorized as follows: poor support (3–8), moderate support (9–11), and strong support (12–14) (13).
| Variable                  | Category       | Frequency (N = 420) | Percent (%) |
|---------------------------|----------------|--------------------|-------------|
| Age                       | 18–30          | 139                | 33.1        |
|                           | 31–40          | 161                | 38.3        |
|                           | 41–50          | 72                 | 17.1        |
|                           | >51            | 48                 | 11.4        |
| Sex                       | Male           | 247                | 58.8        |
|                           | Female         | 173                | 41.2        |
| Religion                  | Orthodox       | 139                | 33.1        |
|                           | Muslim         | 133                | 31.7        |
|                           | Protestant     | 89                 | 21.2        |
|                           | Catholic       | 59                 | 14.0        |
| Marital status            | Single         | 128                | 30.5        |
|                           | Married        | 116                | 27.6        |
|                           | Divorced       | 55                 | 13.1        |
|                           | Separated      | 66                 | 15.7        |
|                           | Widowed/widower| 55                 | 13.1        |
| Education status          | Illiterate     | 123                | 29.3        |
|                           | Primary        | 108                | 25.7        |
|                           | High school    | 111                | 26.4        |
|                           | Diploma        | 48                 | 11.4        |
|                           | Degree and above| 30                | 7.1         |
| Occupational status       | Employed       | 42                 | 10.0        |
|                           | Private Business| 50               | 11.9        |
|                           | Daily labor    | 45                 | 10.7        |
|                           | Farmer         | 80                 | 19.0        |
|                           | Jobless        | 122                | 29.0        |
|                           | Student        | 50                 | 11.9        |
|                           | Pensioned      | 31                 | 7.4         |
| Residency                 | Urban          | 130                | 31.0        |
|                           | Rural          | 290                | 69.0        |
| Service getting           | Free           | 290                | 69.0        |
|                           | With charge    | 130                | 31.0        |
| Living status             | Alone          | 79                 | 18.8        |
|                           | With parent    | 111                | 26.4        |
|                           | With family    | 170                | 40.5        |
|                           | With other     | 60                 | 14.3        |
| Distance from the Hospital| <600 km        | 179                | 42.6        |
|                           | 600–1,000 km   | 241                | 57.4        |

**Ethical consideration**

The Ethical Review Committee (ERC) of Saint Amanuel Mental Specialized Hospital gave their approval. A formal letter of permission from Saint Amanuel mental specialized hospital was received and submitted to the medical directorate of Saint Amanuel mental specialized hospital. Participants in the study provided written informed consent. By eliminating personal identifiers, confidentiality was maintained.

**Results**

**Socio-demographic characteristics of patients**

Of a total of 422 patients who were asked to participate in the study, 420 (99.5%) were fully interviewed. The mean age of the participants was 38.8% (±12.8), with ages ranging from 18 to 80 years. Among the respondents, nearly one-third 161 (38.3%)
TABLE 2  Description of clinical factors among service consumers in out-patient and in-patient service at Amanuel Mental Specialized Hospital Addis Ababa, Ethiopia, 2021 (n = 420).

| Variable               | Category              | Frequency (N = 420) | Percent (%) |
|------------------------|-----------------------|---------------------|-------------|
| Types of mental illness| Schizophrenia         | 111                 | 26.4        |
|                        | Bipolar               | 89                  | 21.2        |
|                        | Depression            | 79                  | 18.8        |
|                        | Anxiety               | 45                  | 10.7        |
|                        | Epilepsy              | 50                  | 11.9        |
|                        | Others                | 46                  | 11.0        |
| Duration of follow up  | 1 month up to 6 months| 77                  | 18.3        |
|                        | 7 months – 1 year     | 84                  | 20.0        |
|                        | 1 year – 5 years      | 112                 | 26.7        |
|                        | > 5 years             | 147                 | 35.0        |
| Availability of medication | No                  | 73                  | 17.4        |
|                        | Little                | 163                 | 38.8        |
|                        | Available             | 136                 | 32.4        |
|                        | Very available        | 48                  | 11.4        |
| Waiting area condition | Poor                  | 40                  | 9.5         |
|                        | Fair                  | 210                 | 50.0        |
|                        | Comfortable           | 145                 | 34.5        |
|                        | Very comfortable      | 25                  | 6.0         |

of the respondents were within the age range of 31–40 years. About 247 (58.8%) were female, more than half, 287 (68.3%) were Christians, and 128 (30.5%) were married. The educational status of participants indicated that about 111 (26.4%) of them attended high school. Regarding occupation, about 122 (29.0%) of participants were jobless. More than half of the participants (69.0%) came from rural areas. More than half, 290 (69.0%), got free service. The living status of most of the patients who live with their families is 170 (40.5%). More than half of the participants come from a distance of 600 km up to 1,000 km (290) (69.0%) (Table 1).

Clinical related characteristics

Regarding the clinical characteristics of the respondents, 111 (26.4%) were diagnosed with schizophrenia and 89 (21.2%) were bipolar patients. Among the participants, 147 (35.0%) had more than 5 years of follow-up. Participants reporting little availability of medication were 163 (38.8%). Half of the participants reported that the waiting area condition was fair (Table 2).

Psycho-social related characteristics

Regarding social support, 197 (46.9. %) had moderate social support, 124 (29.5%) had strong social support and 99 (23.6%) had poor social support.

The magnitude of patient satisfaction

Concerning the magnitude of patient satisfaction, 261 (63.3%) (95% CI 58.3% to 67.9%) were satisfied and 151 (36.7%) (95% CI 32.1 to 41.7%) were dissatisfied (Figure 1).

Factors associated with patient satisfaction

In bivariable binary logistic analysis, variables including sex, educational status, occupation, residence, living status, duration of the illness, and distance from the hospital were found to have
TABLE 3  Bivariable and multivariable logistic regression analysis showing the association between factors and satisfaction among service consumers in out-patient and in-patient at Amanuel Mental Specialized Hospital Addis Ababa, Ethiopia 2021 (n = 420).

| Explanatory variables | Category | Satisfied | Dissatisfied | COR, (95%CI) | AOR, (95%CI) | P-value |
|-----------------------|----------|-----------|--------------|--------------|--------------|---------|
|                       |          | Satisfied | Dissatisfied |              |              |         |
| Sex                   | Male     | 170       | 77           | 1.77 (1.18–2.65) | 1.76 (1.07–2.88) | 0.025*  |
|                       | Female   | 96        | 77           | 1            | 1            |         |
| Educational status    | Illiterate | 101      | 22           | 3.52 (1.49–8.27) | 2.21 (1.64–4.81) | 0.003*  |
|                       | Primary school | 59       | 49           | 0.92 (0.41–2.08) | 1.16 (0.48–2.79) | 0.37    |
|                       | High school | 61       | 50           | 0.93 (0.42–2.10) | 1.18 (0.49–2.85) | 0.36    |
|                       | Diploma   | 28        | 20           | 1.07 (0.43–2.69) | 1.13 (0.42–3.03) | 0.47    |
|                       | Degree and above | 17      | 13           | 1            | 1            |         |
| Occupation            | Employed | 23        | 19           | 1            | 1            |         |
|                       | Private business | 33     | 17           | 1.60 (0.69–3.72) | 1.13 (0.44–2.89) | 0.35    |
|                       | Daily labor | 27       | 18           | 1.23 (0.53–2.90) | 1.09 (0.41–2.90) | 0.27    |
|                       | Farmer    | 52        | 28           | 1.53 (0.72–3.28) | 1.07 (0.44–2.63) | 0.31    |
|                       | Student   | 75        | 47           | 1.32 (0.65–2.67) | 1.51 (0.66–3.42) | 0.43    |
|                       | Jobless   | 37        | 13           | 2.35 (0.98–5.65) | 1.86 (0.69–4.98) | 0.51    |
|                       | Pensioned | 19        | 12           | 1.31 (0.51–3.36) | 0.95 (0.32–2.86) | 0.28    |
| Residence             | Urban     | 70        | 60           | 1            | 1            |         |
|                       | Rural     | 196       | 94           | 1.78 (1.17–2.73) | 1.88 (1.10–3.19) | 0.021*  |
| Living status         | Alone     | 71        | 29           | 2.08 (1.11–3.90) | 1.91 (0.94–3.85) | 0.28    |
|                       | With partner | 57      | 34           | 1.42 (0.76–2.66) | 1.59 (0.78–3.22) | 0.27    |
|                       | With family | 98      | 57           | 1.46 (0.83–2.56) | 1.54 (0.83–2.83) | 0.18    |
|                       | With other | 40        | 34           | 1            | 1            |         |
| Distance of hospital  | <600 km   | 123       | 56           | 1            | 1            |         |
|                       | 600–1,000 km | 143    | 98           | 0.66 (0.44–0.99) | 0.56 (0.34–0.93) | 0.01*   |
| Duration of follow up | 1 up to 6 months | 42     | 36           | 1            | 1            |         |
|                       | 7 months up to 1 year | 38    | 23           | 1.41 (0.72–2.80) | 1.35 (0.63–2.93) | 0.13    |
|                       | 1 up to 5 year | 66     | 37           | 1.52 (0.83–2.78) | 1.35 (0.69–2.64) | 0.11    |
|                       | > 5 year  | 120       | 58           | 1.77 (1.03–3.06) | 1.82 (0.97–3.40) | 0.26    |

*Significant at P < 0.05; COR, Crude Odd Ratio; AOR, Adjusted Odd Ratio; CI, Confidence Interval, 1, Reference.

P < 0.2. These variables fulfilled the minimum requirements for further multivariable binary logistic regression.

From multivariable binary logistic regression only; male sex, rural residence, and having no formal education were significantly associated with patient satisfaction at a P < 0.05.

The odds of being satisfied with psychiatry service among male patients were 1.76 times the odds of female patients (AOR = 1.76; 95% CI = 1.07–2.88). The odds of being satisfied with psychiatry service among rural resident patients were 1.88 times the odds of urban resident patients (AOR = 1.88; 95% CI = 1.09–3.19). The odds of being satisfied with psychiatry service among illiterate patients were 2.21 times the odds of patients who had a degree and above (AOR = 2.21; 95% CI = 1.64–4.81). Patients who came from a distance of 600–1,000 km were 44% less likely to be satisfied with psychiatry service compared to patients who came from a distance of <600 km (AOR = 0.56; 95% CI = 0.34–0.93) (Table 3).

**Discussion**

In this study, patient satisfaction in inpatient and outpatient psychiatric settings was assessed. Of the study participants, 63.3% were satisfied, while 36.67% were dissatisfied which is consistent with the study done at Dessie Referral Hospital which was 61.3% (7). However, the proportion of patients who were satisfied with the general mental healthcare service was lower than in other studies, such as 91% in the USA (15), 81% in Germany (16), Romania (78%) (17), and China (77.1%) (18). The disparity could be attributed to the use of different measurement tools (while the list/white list tool used in Germany), different data collection methods (self-administered questionnaire used in Romania), differences in sociocultural factors, availability of the materials for the provision of qualified service and larger sample size in Romania. Conversely, the result was higher than the findings from Jimma 50.3% (19), Egypt (50%) (20), and 54.6% in Switzerland (21). The
difference could be attributable to a difference in setting and study design in which the Egypt study was done at a national level and a prospective study design was done in Switzerland. The tool used to assess satisfaction in Jimma was 24 items questionnaires but in our study, we used the CSQ-8 questionnaire (19).

Regarding the factors associated with patient satisfaction, the odds of being satisfied with psychiatry service among male patients was 1.76 times the odds of female patients. The results are supported by studies done at saint Paul's Hospital (11), Dessie Referral Hospital (7), Jimma Hospital (19), Japan (22), Qatar (23), and Switzerland (21). This could be due to women in Ethiopian society being more conservative, and they receive less exposure to the general population. Less patient satisfaction among female patients could be attributed to this culture. Male are more involved in the decision-making process than females.

The odds of being satisfied with psychiatry service among illiterate patients were 2.21 times the odds of patients who had a degree and above. This finding coincides with studies done in Ethiopia (14), India (24), and Pakistan (19). This demonstrates that patients with comparatively lower levels of education have lower expectations and are less critical when evaluating the services received. These can leave individuals feeling more satisfied.

The odds of being satisfied with psychiatry service among rural resident patients were 1.88 times the odds of urban resident patients, and it is consistent with studies done at Dessie Referral Hospital (7). A possible explanation for this study seems to be that patients from rural residences come with fewer expectations from the service and less access to information about medical services and quality of care.

Patients who came from a distance of 600–1,000 km were 44% less likely to be satisfied with psychiatry service compared to patients who came from a distance of <600 km. This finding was supported by a study done in Ethiopia (19). The possible reason could be that coming from a long distance for psychiatric services led them to suffer, which created dissatisfaction because patients couldn’t afford payment for transportation and hotel costs.

**Conclusion**

In this study, the satisfaction level of patients receiving mental health services at Amanuel Mental Specialized Hospital was found to be high. Those who were male, illiterate, rural residents, and came from far away were found to have a statistically significant association with satisfaction.

**Recommendation**

Prioritizing care for female patients and those coming from a distance is necessary. More ever, it is preferable to routinely and continually monitor healthcare facilities so that timely feedback can be given and problems that affect patient satisfaction can be resolved.

**Data availability statement**

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

**Ethics statement**

The studies involving human participants were reviewed and approved by the Ethical Review Committee (ERC) of Saint Amanuel Mental Specialized Hospital. The patients/participants provided their written informed consent to participate in this study.

**Author contributions**

EK, ZN, MS, AM, and KA conceived the research, framed the methods, did the analysis, and wrote the final paper. HA and DBD participated in writing the manuscript, framing the method, and write-up. All the authors read and agreed on the final manuscript.

**Acknowledgments**

We are grateful to the data collectors for their admirable endeavors. Also, our appreciation goes to the study participants who willingly contributed to this study by responding to the questionnaires.

**Conflict of interest**

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.
Publisher’s note

All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.

References

1. Nabbuye-Sekandi J, Makumbi FE, Kasangaki A, Kiziza IB, Tugumisirize I, Nishimeye E, et al. Patient satisfaction with services in outpatient clinics at Mulago hospital, Uganda. Int J Qual Health Care. (2011) 23:516–23. doi: 10.1093/ijqhc/mrz040
2. World Health Organization, Research for International Tobacco Control. WHO Report on the Global Tobacco Epidemic, 2008: the MPOWER Package: World Health Organization. (2008).
3. Bleich SN, Ozaltin E, Murray CK. How does health care for a system relate to patient experience? Bull World Health Organ. (2009) 87:271–8. doi: 10.2471/BLT.07.050401
4. Berghofer G, Castille DM, Link B. Evaluation of Client Services (ECS), a measure of treatment satisfaction for people with chronic mental illnesses. Community Ment Health J. (2011) 47:399–407. doi: 10.1007/s10597-010-9331-3
5. World Health Organization. Investing in Mental Health. (2003). Available online at: https://apps.who.int/iris/handle/10665/42823
6. Richter D, Wall A, Bruen A, Whittington R. Is the global prevalence rate of adult mental illness increasing? Systematic review and meta-analysis. Acta Psychiatr Scand. (2019) 140:393–407. doi: 10.1111/acps.13083
7. Yimer S, Yohannis Z, Getinet W, Mekonen T, Fekadu W, Belete H, et al. Satisfaction and associated factors of outpatient psychiatric service consumers in Ethiopia. Patient Prefer Adherence. (2016) 10:1847. doi: 10.2147/PPA.S115767
8. Amin M, Nasharuddin SZ. Hospital service quality and its effects on patient satisfaction and behavioral intention. Clin Gov. (2013) 18:1477–7274. doi: 10.1108/CGJ-05-2012-0016
9. Sitizza J, Wood N. Patient satisfaction: a review of issues and concepts. Soc Sci Med. (1997) 45:1829–43. doi: 10.1016/S0277-9536(97)00128-7
10. Fortin M, Banovtva JM, Fleury MJ. Patient satisfaction with mental health services based on Andersen’s Behavioral Model. Can J Psychiatry. (2018) 63:103–14. doi: 10.1177/0706743717737030
11. Goben KW, Abegaz ES, Abdi STJGP. Patient satisfaction and associated factors among psychiatry outpatients of St Paul’s Hospital, Ethiopia. Gen Psychiatr. (2020) 33:e100120. doi: 10.1136/gpsych-2019-100120
12. Attkisson C. Administering and Scoring the CSQ Scales. Mill Valley, CA: Tamalpais Matrix Systems LLC. (2012).
13. Dalgard OS, Dowrick C, Lehtinen V, Vazquez-Barquero JL, Casey P, Wilkinson G, et al. Negative life events, social support and gender difference in depression. Soc Psychiatry Psychiatr Epidemiol. (2006) 41:444–51. doi: 10.1007/s00127-006-0053-5
14. Desta H, Berhe T, Hintsa S. Assessment of patients’ satisfaction and associated factors among outpatients who received mental health services at public hospitals of Mekelle Town, northern Ethiopia. Int J Ment Health Syst. (2018) 12:1–7. doi: 10.1186/s13033-018-0217-z
15. Stein MB, Roy-Byrne PP, Craske MG, Campbell-Sills L, Lang AJ, Golnelli D, et al. Quality of and patient satisfaction with primary health care for anxiety disorders. J Clin Psychiatry. (2011) 72:970–6. doi: 10.4088/JCP.09m05626blu
16. Kraska RA, Weigand M, Gerardts M. Associations between hospital characteristics and patient satisfaction in Germany. Health Expect. (2017) 20:593–600. doi: 10.1111/hex.12485
17. Ionilã AC. The Romanian Health Care System is in Transition From the Users’ Perspective. (2003). Available online at: https://pure.rug.nl/ws/portalfiles/portal/2994140/c5.pdf
18. Wong EL, Leung MC, Cheung AW, Yim CH, Yeoh E, Griffiths S, et al. population-based survey using PPE-15: relationship of care aspects to patient satisfaction in Hong Kong. Int J Qual Health Care. (2011) 23:390–6. doi: 10.1093/intqhc/mzr037
19. Kassaw C, Tesfaye E, Girma S, Agenagnew L. Perceived patient satisfaction and associated factors among psychiatric patients who attend their treatment at outpatient psychiatry clinic, Jimma University Medical Center, Southwest Ethiopia, Jimma, 2019. Psychiatry J. (2020) 2020:6153234. doi: 10.1155/2020/6153234
20. Alkaabi S, Al-Balushi N, Al-Alawi M, Mirza H, Al-Huseini S, Al-Balushi M, et al. Level and determinants of patient satisfaction with psychiatric out-patient services, Muscat, Oman. Int J Ment Health. (2019) 48:80–94. doi: 10.1080/02074111.2019.1585226
21. Davy B, Keizer I, Croquette P, Bertschy G, Ferrero F, Gex-Fabry M, et al. Patient satisfaction with psychiatric outpatient care in Geneva: a survey in different treatment settings. Schweizer Arch Fur Neurol Psychiatr. (2009) 160:240–5. doi: 10.4444/sanp.2009.02087
22. Tokunaga J, Imanaka Y. Influence of length of stay on patient satisfaction with hospital care in Japan. Int J Qual Health Care. (2002) 14:493–502. doi: 10.1093/intqhc/mzj483
23. Bener A, Ghaloum S. Gender difference on patients’ satisfaction and expectation towards mental health care. Niger J Clin Pract. (2013) 16:285–91. doi: 10.4103/1119-3077.113448
24. Holikatti PC, Kar N, Mishra A, Shukla R, Swain SP, Kar S, et al. study on patient satisfaction with psychiatric services. Indian J Psychiatry. (2012) 54:327. doi: 10.4103/0019-5545.104817