An Overview of Factors Influencing Psychiatric Out-Patient Satisfaction at a Tertiary Care Hospital in Pakistan

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Abstract

Objectives

Patient satisfaction is now becoming the assessment criterion for the quality of health care services provided to patients with mental health issues; therefore, this study aimed to quantify patient satisfaction in the psychiatric outpatient department of Jinnah Hospital, Lahore, Pakistan, and assess the effects of socio-demographic factors and cultural and ethical beliefs on patient satisfaction.

Methods

This is a cross-sectional, observational study with a sample size of 386 patients, using a simple random sampling technique. Patients older than 14 years were included in this study. A questionnaire comprising demographics and cultural and ethical beliefs using the Cultural Attitudes toward Healthcare and Mental Illness Questionnaire, and satisfaction rates using the Psychiatric Out-Patient Experience Questionnaire (POPEQ), was designed for the research project.

Results

The mean age ± SD was 31.2 ± 12.2 years. The POPEQ demonstrated a mean satisfaction score of 3.11 ± 0.90. The majority of the population considered stress (54.4%), family issues (33.4%), and medical illness (33.4%) as the cause of their mental illness. In comparison, the preferable type of treatment for most patients was medication (75.1%) and counseling (36.0%). Among socio-demographic characteristics, education was inversely related to satisfaction (p<0.01). The patients who believed medications to be their preferred treatment for their mental illness were most satisfied (p < 0.01).

Conclusion

This study demonstrates high overall satisfaction rates with psychiatric outpatient services. However, no significant association between sociodemographic characteristics and satisfaction levels was established except for the education status of the patients and their preferred method of treatment. The study did not reveal any influence of cultural beliefs on the degree of satisfaction of patients.

Introduction

The global burden of mental health disorders has increased exponentially in the last few decades, with a significant increase in disability-affected life years (DALY) [1]. Despite the escalating incidence of mental health disorders in low- and middle-income countries like Pakistan, mental health services remain insufficient. There is one psychiatrist for a population of 0.5-1 million, with a similar ratio for psychologists. The five major mental health hospitals in big cities of Pakistan provide 1.9 beds: 100,000 population [2]. Another alarming fact is that community-based outreach services are practically non-existent. Therefore, the quality of care provided by the existing healthcare services needs careful evaluation, so extended plans can be formulated for the future.

In recent years, patient satisfaction with psychiatric services has become the cornerstone of quality assessment as it is important to take into account the opinion of its users to improve the standard of health care. Many developed countries emphasize patient-centered care as the primary goal of their services [3]. There has also been a surge in research regarding patient satisfaction, however, there is minimal data available from developing countries like Pakistan. Thimm et al. reported that active involvement of psychiatric patients in their management such as decision making, setting treatment goals, and termination of treatment was strongly associated with the satisfaction of patients [4]. Patient expectations from a mental
health service define their satisfaction and consequently, the nature of their experience. Therefore, mental health care providers are expected to deliver customized care to each individual to meet those expectations.

There is a multitude of socio-demographic and clinical associations thought to influence patient satisfaction, but the results differ among studies. Being a female, being of older age, being married, and being employed were associated with higher levels of satisfaction [5]. Self-perception of being physically and mentally sound was also associated with increased satisfaction [6]. In a study in Malawi about the impact of living areas on satisfaction, the rural population was found to be significantly less satisfied than the urban population [7]. In contrast, several other studies found no significant association between socio-demographic or clinical factors and patient satisfaction [8]. Furthermore, satisfaction rates may differ among patients receiving treatment from the same mental healthcare service. Some deficiencies on part of the mental health care team have also been reported, which need to be addressed, including inadequate treatments and limited use of guidelines [9-14]. Additionally, there is also some disparity between services in different geographical regions of the world [15].

Patients suffering from mental ailments are stigmatized and discriminated against worldwide, contributing further to their poor quality of life [10,16-18]. For most patients and their families, presentation to mental health service is their last hope to improve their quality of living and overcome the psychological barriers maligning their daily lives. In an outpatient department, patient satisfaction with their mental health care experience plays a critical role in their compliance to treatment, regular follow-up, and outcome. Thus, quality assessment is needed to identify the gaps in the mental health care system and identify the key elements leading to patient dissatisfaction.

Cultural and ethical beliefs in a region determine the attitude of patients towards mental health services [15]. The health belief model of an individual shapes his interaction with the physician and compliance with treatment. Hence, it indirectly influences the effectiveness of a health care system to treat its patients. The primary objective of this study was to quantify the overall patient satisfaction and assess the influence of demographic, cultural, and ethical beliefs on the satisfaction levels of patients presenting in the psychiatric outpatient department of Jinnah Hospital, Lahore, Pakistan.

**Materials And Methods**

**Study design and procedure**

This observational, cross-sectional study was designed to measure the patient satisfaction with psychiatric outpatient services of Jinnah Hospital, a tertiary care hospital located in the center of Lahore, Pakistan, over two months. Investigators who were working as interns in the same department handed out questionnaires to patients after their consultations. Treating psychiatrists were not aware of the feedback given by their patients, eliminating any chance of interference in the treatment process of the patients. Informed consent was taken in written form after explaining the purpose of this research. Patients were guaranteed that being a part of this research will not affect their treatment. Approval for this study was taken from the Ethical Review Board of Allama Iqbal Medical College/Jinnah Hospital, Lahore with approval number: 22/14/01/2021/S2 ERB. The data collection period lasted from February 14, 2021, to April 10, 2021.

**Instruments**

The questionnaire was broken down into four sections: section one comprised sociodemographic characteristics including sex, age, employment status, monthly income, marital status, number of children, area of residence, and number of family members at home; section two assessed cultural beliefs regarding psychiatric services using modified a Cultural Attitudes toward Healthcare and Mental Illness Questionnaire in the form of multiple-choice questions; section three measured patient satisfaction through Psychiatric Out-Patient Experiences Questionnaire (POPEQ), the 11 items of which were ranked on a five-point Likert scale from 'not at all' (0) to 'to a very high degree' (4) giving a single-index answer; and section four included information about the treatment plan of the patient, whether drugs or therapy. The Cultural Attitudes toward Healthcare and Mental Illness Questionnaire, developed for the Primary Care Research in Substance Abuse and Mental Health for the Elderly (PRISM-E) [19], was modified to be used for this research. This questionnaire was used to demonstrate the beliefs of patients regarding the cause of their mental illness, their preferences for the type of treatment, their autonomy regarding treatment decisions, and the desirable attributes of their treating psychiatrist/psychologist. POPEQ is a validated and reliable instrument with good test-retest reliability [20]. It can be subdivided into three subscales: quality of clinical interaction (six items), the outcome of the treatment (three items), and information provision (two items). Internal consistency of POPEQ was assessed by Olsen et al. (2010), which was found to be high with Cronbach’s alpha and test-retest reliability above 0.9 and variance around 50% [21]. This patient satisfaction scale has been reported to have moderate-to-excellent psychometric properties. The questionnaire, originally in English, was translated into the local language (Urdu) and back-translated into English taking assistance from the expertise of a local translator. The questionnaire was read out to those individuals who had no formal education at school and were unable to read and write. Their answers were recorded by the investigators on the questionnaire form.
Study sample
The sample size was calculated by using a single proportion formula for continuous data—normally-distributed, where $\sigma$ is for the unknown variance or SD (0.5), $Z$ is the reliability coefficient at 95% CI (1.96), $d$ is the size of difference to detect the minimal effect of interest. With the margin of error of 0.05 and 5% incomplete filling of the questionnaire, our sample size was calculated to be 410-24=386. Simple random sampling technique was used. Eligible individuals were all adolescents (≥14 years) and older adults with no cognitive or physical impairment. All children less than 14 years old and all individuals who were physically or mentally incompetent were excluded.

Data analysis
Data were analyzed using IBM SPSS Statistics for Windows, Version 23.0 (Released 2015, IBM Corp., Armonk, New York, United States). Two-tailed Pearson’s chi-square tests were used with significance levels set at 0.05 and 0.01 for comparing frequencies.

Results
Socio-demographic characteristics of the patients
The socio-demographic characteristics of 386 individuals (42.2% males, 57.8% females) participating in this study for one month are given in Table 1. Mean age ± SD was 31.2 ± 12.2 years and ranged from 14 to 70 years. The majority (80.3%) of the participants were living in urban areas, 6.5% in suburban areas, and 13.2% in rural areas. Of the participants, 11.7% were illiterate (unable to read or write), while 24.8% were graduates with bachelor’s, master’s, and higher degrees. The rest of the population had completed their primary or secondary education. The marital status of the candidates showed that 41.2% were unmarried, 51.2% were married, and 7.5% were divorced or widowed. Regarding the households, 45.3% of the participants were living in a joint family, while 54.7% were living as a nuclear family with an average of 8.57 individuals per household.
| Variable            | Mean (SD) | Frequency (%) |
|---------------------|-----------|---------------|
| **Age**             | 31.2 (12.2)|               |
| **Sex**             |           |               |
| i. Male             | 163 (42.2)|               |
| ii. Female          | 223 (57.8)|               |
| **Living Area**     |           |               |
| i. Urban            | 310 (80.3)|               |
| ii. Sub-urban       | 25 (6.5)  |               |
| iii. Rural          | 51 (13.2) |               |
| **Education**       |           |               |
| i. Illiterate       | 45 (11.7) |               |
| ii. Islamic Education| 16 (4.1) |               |
| iii. Primary        | 19 (4.9)  |               |
| iv. Middle          | 75 (19.4) |               |
| v. Secondary        | 85 (22.0) |               |
| vi. Higher Secondary| 50 (13.0) |               |
| vii. Graduate (Bachelors/Masters/PhD) | 96 (24.8) |               |
| **Employment Status**|         |               |
| i. Employed         | 119 (30.8)|               |
| ii. Unemployed      | 70 (18.1) |               |
| iii. Student        | 78 (20.2) |               |
| iv. Housewife       | 119 (30.8)|               |
| **Marital Status**  |           |               |
| i. Single           | 159 (41.2)|               |
| ii. Married         | 198 (51.3)|               |
| iii. Widowed        | 11 (2.8)  |               |
| iv. Divorced        | 18 (4.7)  |               |
| **Family Type**     |           |               |
| i. Nuclear          | 211 (54.7)|               |
| ii. Joint           | 175 (45.3)|               |
| **Siblings**        | 5.3 (2.2) |               |
| **Children**        | 3.1 (2.0) |               |
| **Total individuals in the house** | 8.5 (4.8) |               |

**TABLE 1: Demographics**

**Patient satisfaction**

The POPEQ demonstrated a mean satisfaction score of 3.11 ± 0.90 (Table 2). Further categorization in three subscales revealed average satisfaction scores to be 3.16, 3.23, and 2.70 for change in mental illness since the start of treatment, interaction with the doctor, and information regarding illness and treatment,
respectively.

## TABLE 2: Psychiatric Out-Patient Experience Questionnaire (POPEQ) scores

| Variables       | Mean (SD) | Change       | Interaction   | Information   | Total       |
|-----------------|-----------|--------------|---------------|---------------|-------------|
| Change          | 3.16 (0.88) |              |               |               |             |
| Interaction     | 3.23 (0.90) |              |               |               |             |
| Information     | 2.70 (1.39) |              |               |               |             |
| Total           | 3.11 (0.90) |              |               |               |             |

Among socio-demographic characteristics, education was inversely related to the satisfaction level of the patients (p<0.01), indicating that the more educated the patient, the less satisfied he/she is likely to be by the services provided at the psychiatry out-patient department (Table 3). Increasing age and the number of children also had a slight direct impact on the degree of satisfaction.

## TABLE 3: Relationship between satisfaction score and demographics

| Variables                     | Correlation | Change       | Interaction   | Information   | Total       |
|-------------------------------|-------------|--------------|---------------|---------------|-------------|
| Sex                           | Pearson Correlation | 0.063 | 0.016 | 0.020 | 0.032 |
|                               | Sig. (2-tailed) | 0.217 | 0.753 | 0.693 | 0.526 |
| Age                           | Pearson Correlation | 0.117** | 0.106** | 0.087 | 0.115** |
|                               | Sig. (2-tailed) | 0.021 | 0.037 | 0.087 | 0.242 |
| Living type                   | Pearson Correlation | -0.013 | -0.015 | -0.006 | -0.013 |
|                               | Sig. (2-tailed) | 0.794 | 0.765 | 0.917 | 0.801 |
| Education                     | Pearson Correlation | -0.139** | -0.196** | -0.108* | -0.175** |
|                               | Sig. (2-tailed) | 0.006 | 0.000 | 0.034 | 0.001 |
| Marital status                | Pearson Correlation | 0.096 | 0.063 | 0.053 | 0.076 |
|                               | Sig. (2-tailed) | 0.059 | 0.217 | 0.301 | 0.135 |
| Children                      | Pearson Correlation | 0.126 | 0.146* | 0.100 | 0.143* |
|                               | Sig. (2-tailed) | 0.059 | 0.029 | 0.137 | 0.033 |
| Siblings                      | Pearson Correlation | 0.040 | 0.019 | 0.048 | 0.036 |
|                               | Sig. (2-tailed) | 0.438 | 0.703 | 0.342 | 0.478 |
| Family type                   | Pearson Correlation | -0.030 | 0.004 | -0.006 | -0.026 |
|                               | Sig. (2-tailed) | 0.559 | 0.937 | 0.184 | 0.605 |
| Total individuals in the house| Pearson Correlation | 0.030 | 0.003 | 0.011 | 0.013 |
|                               | Sig. (2-tailed) | 0.562 | 0.948 | 0.830 | 0.796 |

** Correlation is significant at the 0.01 level (2-tailed); * Correlation is significant at the 0.05 level (2-tailed); c Cannot be computed because at least one of the variables is constant

### Cultural and ethical beliefs

The majority of the population considered stress (54.4%), family issues (33.4%), and medical illness (33.4%) as the cause of their mental illness (Table 4). The preferable type of treatment for most patients was
medication (75.1%) including pills, injectables, or oral solutions, and counseling (36.0%). Most individuals preferred to talk about their mental health with their family members (55.4%), including parents and siblings, and their treating psychiatrist (37.8%). A significant portion of the population (42.5%) stated that they make mental health care decisions on their own. The patients who believed oral medications to be their preferred treatment for their mental illness were most satisfied (p < 0.01). In contrast, the patients preferring psychological counseling were left significantly unsatisfied (p < 0.01).

| Variables (questionnaire) | Frequency (%) | Correlation with POPEQ | Change | Interaction | Information | Total |
|---------------------------|---------------|------------------------|--------|-------------|-------------|-------|
| What, in your opinion, is the cause of your mental illness? | | | | | | |
| Stress/worry | 210 (54.4%) | Pearson Correlation | 0.087 | 0.070 | 0.082 | 0.085 |
| | | Sig. (2-tailed) | 0.087 | 0.170 | 0.108 | 0.095 |
| Loss (family, friends) | 69 (17.9%) | Pearson Correlation | 0.010 | 0.005 | 0.021 | 0.011 |
| | | Sig. (2-tailed) | 0.843 | 0.929 | 0.678 | 0.823 |
| Lack of pleasurable activities | 67 (17.4%) | Pearson Correlation | -0.114* | -0.098 | -0.050 | -0.099 |
| | | Sig. (2-tailed) | 0.025 | 0.054 | 0.327 | 0.052 |
| Family issues | 129 (33.4%) | Pearson Correlation | -0.007 | 0.018 | 0.016 | 0.012 |
| | | Sig. (2-tailed) | 0.887 | 0.731 | 0.752 | 0.818 |
| Political stress | 10 (2.6%) | Pearson Correlation | -0.004 | -0.088 | -0.030 | -0.076 |
| | | Sig. (2-tailed) | 0.144 | 0.084 | 0.560 | 0.134 |
| Safety issues | 29 (7.5%) | Pearson Correlation | -0.025 | -0.046 | 0.004 | -0.030 |
| | | Sig. (2-tailed) | 0.624 | 0.370 | 0.938 | 0.555 |
| Medical illness | 129 (33.4%) | Pearson Correlation | -0.068 | -0.021 | 0.057 | -0.012 |
| | | Sig. (2-tailed) | 0.186 | 0.686 | 0.260 | 0.807 |
| Infectious disease | 1 (0.3%) | Pearson Correlation | 0.029 | 0.033 | 0.047 | 0.040 |
| | | Sig. (2-tailed) | 0.573 | 0.512 | 0.354 | 0.438 |
| Nutritional deficiency | 32 (8.3%) | Pearson Correlation | -0.047 | -0.049 | -0.007 | -0.041 |
| | | Sig. (2-tailed) | 0.356 | 0.333 | 0.890 | 0.426 |
| Genetic | 24 (6.2%) | Pearson Correlation | -0.062 | -0.084 | -0.107* | -0.083 |
| | | Sig. (2-tailed) | 0.227 | 0.208 | 0.036 | 0.105 |
| Chemical imbalance | 53 (13.7%) | Pearson Correlation | -0.014 | -0.029 | -0.026 | -0.027 |
| | | Sig. (2-tailed) | 0.784 | 0.575 | 0.609 | 0.600 |
| Spirit/Psyche | 68 (17.6%) | Pearson Correlation | 0.004 | -0.041 | -0.009 | -0.023 |
| | | Sig. (2-tailed) | 0.941 | 0.420 | 0.855 | 0.651 |
| Disturbance of body, mind, and spirit | 61 (15.8%) | Pearson Correlation | -0.040 | -0.054 | 0.013 | -0.035 |
| | | Sig. (2-tailed) | 0.431 | 0.288 | 0.802 | 0.492 |
| Something wrong you did in the past | 39 (10.9%) | Pearson Correlation | -0.087 | -0.058 | -0.142** | -0.097 |
| | | Sig. (2-tailed) | 0.087 | 0.256 | 0.005 | 0.057 |
| Supernatural (witchcraft, hexes) | 33 (8.5%) | Pearson Correlation | 0.036 | 0.006 | -0.012 | 0.012 |
| | | Sig. (2-tailed) | 0.482 | 0.900 | 0.820 | 0.814 |
| Environment/culture | 43 (11.1%) | Pearson Correlation | -0.062 | -0.055 | 0.040 | -0.035 |
| | | Sig. (2-tailed) | 0.226 | 0.281 | 0.439 | 0.491 |
| Variables (questionaire) | Frequency (%) | Pearson Correlation with POPEQ Change | 0.059 | 0.006 | 0.005 | -0.020 | Total |
|--------------------------|---------------|--------------------------------------|--------|--------|--------|--------|-------|
| Moving to a different place | 26 (6.7%) | Pearson Correlation | -0.013 | 0.027 | 0.018 | 0.016 |
| Cultural differences | 17 (4.4%) | Pearson Correlation | -0.015 | 0.001 | 0.023 | 0.003 |
| Adjusting to a different culture | 30 (7.8%) | Pearson Correlation | 0.029 | 0.014 | 0.040 | 0.028 |
| Drugs | 4 (1.0%) | Pearson Correlation | 0.574 | 0.777 | 0.434 | 0.585 |
| None of these | 19 (4.9%) | Pearson Correlation | 0.011 | 0.033 | -0.098 | -0.009 |
| Treatment preferences | | | | | | | |
| Pills/medications | 290 (75.1%) | Pearson Correlation | 0.222** | 0.264** | 0.190** | 0.258** |
| Herbal remedies | 19 (4.9%) | Pearson Correlation | -0.089 | -0.074 | -0.025 | -0.071 |
| Counselling | 139 (36.0%) | Pearson Correlation | -0.220** | -0.243** | -0.131** | -0.228** |
| Group counselling | 19 (4.9%) | Pearson Correlation | -0.094 | -0.091 | -0.081 | -0.098 |
| Alternative therapies | 29 (7.5%) | Pearson Correlation | 0.063 | 0.074 | 0.114 | 0.055 |
| Spiritual advice | 50 (13.0%) | Pearson Correlation | 0.083 | 0.051 | 0.032 | 0.061 |
| Who would you talk to about your mental health/substance abuse issues? | | | | | | | |
| Spouse | 74 (19.2%) | Pearson Correlation | 0.113* | 0.062 | 0.077 | 0.088 |
| Family member living with you | 214 (55.4%) | Pearson Correlation | 0.022 | 0.053 | 0.018 | 0.039 |
| Family member not living with you | 25 (6.5%) | Pearson Correlation | 0.083 | 0.298 | 0.731 | 0.445 |
| Friend | 101 (26.2%) | Pearson Correlation | 0.017 | 0.068 | 0.056 | 0.057 |
| Healer | 38 (9.8%) | Pearson Correlation | -0.037 | -0.038 | -0.048 | -0.044 |
| Psychiatrist | 146 (37.8%) | Pearson Correlation | -0.012 | 0.027 | 0.008 | 0.012 |
| Medical doctor | 29 (7.5%) | Pearson Correlation | 0.058 | 0.035 | 0.025 | 0.027 |
| Social worker | 11 (2.8%) | Pearson Correlation | -0.151** | -0.153** | -0.153** | -0.168** |
### TABLE 4: Cultural influences on mental health

** Correlation is significant at the 0.01 level (2-tailed); * Correlation is significant at the 0.05 level (2-tailed); c Cannot be computed because at least one of the variables is constant.

POPEQ: Psychiatric Out-Patient Experience Questionnaire

The most desirable characteristics of the healthcare provider were: speaking the same language as the patient, understanding the culture of the patient (Table 5), and being open to different treatment options; however, none of these factors were found to be significant (p>0.05).
**TABLE 5: Preferred characteristics of health care provider**

|                                    | Frequency (%) | Correlation with POPEQ | Change | Interaction | Information | Total |
|------------------------------------|--------------|-------------------------|--------|-------------|-------------|-------|
| **Speaking same language**          |              |                         |        |             |             |       |
| Disagree                           | 221 (57.3%)  | Pearson Correlation     | 0.051  | 0.047       | 0.061       | 0.057 |
| Neither Agree nor Disagree         | 140 (36.3%)  | Sig. (2-tailed)         | 0.315  | 0.352       | 0.229       | 0.260 |
| Agree                              | 25 (6.5%)    |                         |        |             |             |       |
| **Being same racial/ethnic group** |              |                         |        |             |             |       |
| Disagree                           | 386 (100%)   | Pearson Correlation     | 0.065  | 0.082       | 0.094       | 0.089 |
| Neither Agree nor Disagree         | 0 (0.0%)     | Sig. (2-tailed)         | 0.201  | 0.108       | 0.065       | 0.082 |
| Agree                              | 0 (0.0%)     |                         |        |             |             |       |
| **Being same gender**              |              |                         |        |             |             |       |
| Disagree                           | 296 (76.4%)  | Pearson Correlation     | 0.034  | 0.036       | 0.015       | 0.032 |
| Neither Agree nor Disagree         | 86 (22.3%)   | Sig. (2-tailed)         | 0.504  | 0.479       | 0.774       | 0.535 |
| Agree                              | 5 (1.3%)     |                         |        |             |             |       |
| **Being same age**                 |              |                         |        |             |             |       |
| Disagree                           | 386 (100%)   | Pearson Correlation     | 0.003  | 0.018       | -0.013      | 0.006 |
| Neither Agree nor Disagree         | 0 (0.0%)     | Sig. (2-tailed)         | 0.958  | 0.730       | 0.7960      | 0.901 |
| Agree                              | 0 (0.0%)     |                         |        |             |             |       |
| **Being open to different treatment** |            |                         |        |             |             |       |
| Disagree                           | 304 (78.7%)  | Pearson Correlation     | 0.028  | 0.016       | 0.042       | 0.030 |
| Neither Agree nor Disagree         | 72 (18.7%)   | Sig. (2-tailed)         | 0.580  | 0.753       | 0.413       | 0.562 |
| Agree                              | 10 (2.5%)    |                         |        |             |             |       |
| **Understanding your culture**      |              |                         |        |             |             |       |
| Disagree                           | 174 (45.0%)  | Pearson Correlation     | -0.051 | 0.004       | 0.008       | 0.011 |
| Neither Agree nor Disagree         | 166 (43.0%)  | Sig. (2-tailed)         | 0.316  | 0.943       | 0.882       | 0.835 |
| Agree                              | 46 (11.9%)   |                         |        |             |             |       |

**Correlation is significant at the 0.01 level (2-tailed); * Correlation is significant at the 0.05 level (2-tailed); c Cannot be computed because at least one of the variables is constant**

POPEQ: Psychiatric Out-Patient Experience Questionnaire

**Discussion**

This study assessed the degree of satisfaction of psychiatric outpatients by qualitative measurement tools, revealing that majority of the patients were highly satisfied with the services provided by the psychiatric department. As compared to previous studies [4,8], no statistically significant association between patient satisfaction and socio-demographic characteristics (age, gender, marital status, occupation, employment status, area of residence, and housing situation) was established except for the education status of patients, which showed that higher education level was linked to greater dissatisfaction. One possible reason is that higher education leads to higher expectations from mental health care providers and significantly impacts patient satisfaction. These results are consistent with another study carried out in Nigeria by Obayi et al., in which education was found to be inversely related to patient satisfaction [5].

Assessment of patient satisfaction by POPEQ showed that patients were most satisfied with their ‘interaction’ with the psychiatrist and psychologist, followed by the ‘change’ in their illness since the start of treatment, indicating that quality doctor-patient interaction and improvement in symptoms had a positive impact on patient satisfaction. This study also revealed that a significant percentage of patients were dissatisfied with the information given to them about their disease and its treatment options. Many other studies have shown that information about the disease, treatment options, and psychoeducation has a
profound effect on patient satisfaction [3]. Lack of involvement in mental health care decisions leads to a loss of mutual trust between a patient and the treating physician and declines the quality of interaction [4].

The respondents were asked about their opinion regarding the triggering and contributing factors to their mental illness. Most patients considered stress, family issues, and physical illnesses as an important cause of their mental illness rather than superstitious beliefs like witchcraft and spirits and, thus, relied more on psychotherapy and medications for treatment. These results are in contrast to a study conducted in India by Kate et al. (2012), which revealed that two-thirds of the population believed sorcery and evil spirits were a probable cause of mental illnesses [22]. It may be due to a bias as patients seeking help from a hospital may not believe in evil spirits and sorcery causing mental health problems. Our findings establish that the patients who believe to be cured by medications are most satisfied with their healthcare provider and those who expect to be cured by counseling are least satisfied. However, the authors believe that due to the potential for dependence and significant adverse effects of psychiatric medications, patients should be educated more about the benefits of non-pharmacological methods by their treating doctor. Several pieces of research have shown comparable efficacy of cognitive therapy to medications for treating depression [23], making it an acceptable alternative. Family and friends often play a supportive role in assisting patients in seeking help regarding mental illness, but it was interesting to note that the majority of the study population decided to seek help on their own. The preferable attributes of health care providers according to the patients were speaking the same language, understanding the culture of patients, and keeping multiple treatment options in view. These findings are similar to a recent study by Taylor (2020), which revealed that clients prefer providers that are similar to themselves in various aspects [24].

The strengths of this study include a large sample size. Selection bias was minimized by using simple random sampling and was representative of the population presenting in the outpatient psychiatry department. Another strength was the utilization of validated and standardized questionnaires. To reduce observer bias, the collection of data was done by interns who were not directly involved in patient treatment, and patients were encouraged to express their views freely.

Limitations of this study include a higher tendency towards reporting a positive response due to the ongoing nature of treatment and false interpretation of the questions as they were translated from English.

Conclusions

This study demonstrates high overall satisfaction rates with psychiatric outpatient services, which indicates satisfactory services being provided at tertiary care hospitals. However, no significant association between socio-demographic characteristics and satisfaction levels was established, except for the education status of the patients as higher education status increased the likelihood of dissatisfaction. Most patients considered stress to be the cause of their mental illness and expected to be treated with medications.

Future studies should focus on determining patient satisfaction scores at primary and secondary healthcare services, and finding other parameters that impact the satisfaction of psychiatric patients. Moreover, the possible methods to be adopted by the doctors to improve patient satisfaction should be highlighted.

Additional Information

Disclosures

Human subjects: Consent was obtained or waived by all participants in this study. Ethical Review Board of Allama Iqbal Medical College/Jinnah Hospital, Lahore, Pakistan issued approval 22/14/01/2021/S2 ERB. This is to state that the research project ‘Influence Of Cultural And Ethical Beliefs On Psychiatric Outpatient Satisfaction In Jinnah Hospital, Lahore’ by Dr. Fatima Tahir, House Officer in Department of Psychiatry, Allama Iqbal Medical College/Jinnah Hospital, Lahore, as Principal Investigator, stands approved by the Ethical Review Board of Allama Iqbal Medical College/Jinnah Hospital, Lahore in its 81st meeting, dated January 14, 2021. Animal subjects: All authors have confirmed that this study did not involve animal subjects or tissue. Conflicts of interest: In compliance with the ICMJE uniform disclosure form, all authors declare the following: Payment/services info: All authors have declared that no financial support was received from any organization for the submitted work. Financial relationships: All authors have declared that they have no financial relationships at present or within the previous three years with any organizations that might have an interest in the submitted work. Other relationships: All authors have declared that there are no other relationships or activities that could appear to have influenced the submitted work.

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