

# **PATHWAY TO CARE: HEALTH BELIEF MODEL AND BARRIERS IN MENTAL HEALTH SETTINGS**

**SAWERA MANSOOR<sup>1</sup> AND TASKEEN MANSOOR<sup>2</sup>**

<sup>1</sup>Department of Psychiatry, Foundation University Islamabad, Pakistan

<sup>2</sup>Department of Social and Behavioral Sciences, National University of Medical Sciences, Rawalpindi, Pakistan

**CORRESPONDENCE: DR. SAWERA MANSOOR** E-mail: sawera85@gmail.com

Submitted: August 27, 2022

Accepted: December 25, 2022

## **ABSTRACT:**

### **OBJECTIVE**

To assess the pathway to mental health care including the health belief model and barriers faced by patients

### **STUDY DESIGN**

Cross-sectional research

### **PLACE AND DURATION OF STUDY**

This study was conducted from June to Dec 2016 at a private tertiary care psychiatric facility in Rawalpindi, Pakistan

### **SUBJECTS AND METHODS**

Through consecutive sampling, 246 patients were made part of the sample. A semi structured questionnaire was used to identify the symptom origin according to their health belief model as well as the barriers to care. Study variables were summarized using Descriptive statistics, and Chi square test was applied for association between common barriers to care and relevant socio-demographic variables using SPSS 20.0.

### **RESULTS**

Out of 246 patients (61.4% females and 38.6% males), most (39%) believed in a physical origin of their mental health symptoms followed by supernatural (32.9%) and psychological causes (28%). The most commonly reported type of barrier to care was Structural (68%) including

Financial constraints and Lack of easy access to specialist resources whereas Attitudinal barriers such as Low perceived need and Perceived side effects of psychiatric medications were found in 22% cases. Stigma associated with psychiatric illnesses was reported by 10% cases. The educational status, locality of residence and monthly family income were significantly associated with structural and attitudinal barriers to mental health care.

## **CONCLUSION**

Patients with low literacy rates, rural based living and socioeconomic disadvantage are more likely to report structural and attitudinal barriers to accessing mental health services.

## **KEYWORDS**

Barriers, health beliefs, Mental health, Pathway

## **INTRODUCTION**

Common mental disorders have been identified as a leading cause of disease burden worldwide.<sup>1</sup> Psychiatric illnesses tend to be chronic and pervasive, thus exerting a significant negative impact on the global functioning and quality of life of the afflicted individuals. Furthermore, there is a broader social and economic cost, including lack of gainful employment, family income loss and caregiver burden while managing patients of mental illnesses. These factors, coupled with the increased demand for related medical services, can be especially devastating for affected populations in Low- and middle-income countries.<sup>1</sup> Most people with mental health disorders are unable to access appropriate services and thus remain underserved or inappropriately served. The World Health Organization has reported a huge gap in terms of the mental health needs of vulnerable population and the available evidence-based treatment options. The shortage of human and financial resources at both the primary and tertiary care level of health systems in developing countries may account for this treatment gap.<sup>2</sup>

Pakistan is a low and middle income country and the majority of the population resides in rural areas where literacy rates are low. Here, traditional medical treatment is conveniently available and culturally acceptable. In such settings, people may favour community-based practitioners and faith healers over the modern health services in tertiary care. Local researchers<sup>3, 4</sup> have reported community based health providers as the first point of contact for the majority of population, even those who are showing symptoms of major mental illnesses.

The Health Belief Model is a set of beliefs held by the patient, his/ her family and their community having a strong influence on their subjective experience of health, illness and treatment seeking. The Pathway to care is a roadmap where the patients take decisions for seeking treatment based on their understanding of the perceived susceptibility and seriousness of the illness, along with the barriers that block or delay treatment.<sup>5</sup> A recent local study explored the lived experiences of COVID-19 survivors and their family members in Pakistan.<sup>6</sup> The authors reported how the patients navigate biomedical systems, complementary healing practices and stigma; their own perceived vulnerability to COVID-19 and acceptability of precautionary behaviours shaped their pathway to care. Another local article systematically reviewed the attitudes, perception and behaviours of the Pakistani community related to their mental health problems.<sup>7</sup> The author reported studies where participants identified biological reasons as the most possible cause of mental illness and disregarded potential psychological or psychiatric reasons. This may be a cultural reasoning related to symptom origin which paves the way for avoiding psychiatric services.

Social stigma can be another hindering factor that blocks access to psychiatric services. A study described the experiences of Pakistani women living in UK, where the role of ‘Izzat’ and stigma related factors was found to be contributing to self-management or seeking professional help in this vulnerable population.<sup>8</sup> Regarding attitudinal barriers to mental health care, a survey conducted in Pakistan asked the general public what factors hold them back from seeking psychological help. This qualitative report highlighted lack of faith in psychological treatments, social defame, personal shame and bad reputation of mental health practitioners as some factors preventing individuals from getting support for their mental health needs.<sup>9</sup>

Given the available scientific database, there appeared to be a knowledge gap related to the health belief model and barriers to accessing mental health care in our setup. Most of the available local

literature is based on the perceptions of the general public related to mental health. Therefore, we felt it prudent to focus on patients with mental health needs presenting to our tertiary care psychiatric facility, so the specific dimensions of their health belief model can be documented. In addition, we aimed to record the lived experience of these patients in terms of the barriers they faced in the pathway to care in our mental health settings. The research findings will provide an insight into the health belief model which is a psychosocial determinant of treatment seeking and the barriers to care. Effective strategies can then be formulated to improve the utilisation of mental health services by addressing these factors.

## **SUBJECTS AND METHODS**

This Cross-sectional study was carried out at the Outpatient department of Fauji Foundation Hospital, Rawalpindi from June to Dec 2016. Ethical approval was obtained from the Institutional Ethical Review board at the study venue.

Consecutive sampling was used to invite all adult patients, male and female, who had their first consultation at the study venue during the study period. We excluded patients who had attended any other specialty psychiatric health facility in the past 01 year to avoid the recall bias regarding their pathway to care based on their past utilisation of psychiatric services. Patients with severe mental illness who were unable to give an appropriately detailed account were also excluded in case a reliable informant was not available to provide collateral information.

The data collection team comprised one consultant psychiatrist and two post graduate trainees who carried out the following steps after a debriefing session. All study participants were informed about the study objectives to assess the utilisation of mental health services and barriers to care perceived in the pathway to care. After written informed consent was taken from each participant, a serial reference number was assigned to each case (written on their set of questionnaire booklet) Anonymity and confidentiality was thus ensured for all subsequent data handling.

The relevant socio demographic details of the patients participating in the research were recorded in a specially designed data collection form. The variables included the age, gender, marital status, educational status, locality of residence and monthly family income. A semi-structured interview was then conducted to elicit the health belief model and barriers to accessing mental health care. The Barriers to Access to Care Evaluation <sup>10</sup> scale was used as the basis for questions related to

structural, attitudinal and stigma related barriers in patients<sup>11</sup>. (Permission taken from authors via email)

The data was entered and analysed using SPSS version 20.0. The variables included age group, gender, educational status, locality of residence and monthly family income along with symptom origin and perceived barriers to mental health care (structural, attitudinal and stigma related barriers). Descriptive statistics (mean, standard deviation, and percentages) were used for summarising the study variables. Between-group variance in categorical correlates was determined using the chi-square test. A p value of <0.05 was considered as significant.

## RESULTS

A total of 246 patients were included in the study. The mean age was 35.65 years (SD  $\pm$  11.96) with a range of 16 to 61 years. Of all, 151 (61.4%) were females and 95 (38.6%) were males. Within the study sample, 44 (17.9%) had no formal education, 90 (36.6%) had primary education, 51 (20.7%) were educated up to secondary school and 61 (24.8%) reported having tertiary education. Regarding the locality of residence, 142 (57.7%) patients were from rural areas while 104 (42.3%) were urban based. Most patients reported having a monthly family income below Rs 30,000; only 58 (23.5%) patients had a family income of more than Rs 30,000 per month. Depressive disorder (38.6%), Anxiety disorder (22%) Bipolar affective disorder (20.3%) and Schizophrenia (19.1%) were the common clinical diagnoses in our study population.

Figure 1 shows the percentage distribution of symptom origin based on the health belief model of patients. The majority of patients (39%) believed in a physical origin of their mental health symptoms; followed by supernatural (32.9%) and psychological causes (28%).

**Figure 1**

**Percentage distribution of Health beliefs about symptom origin**

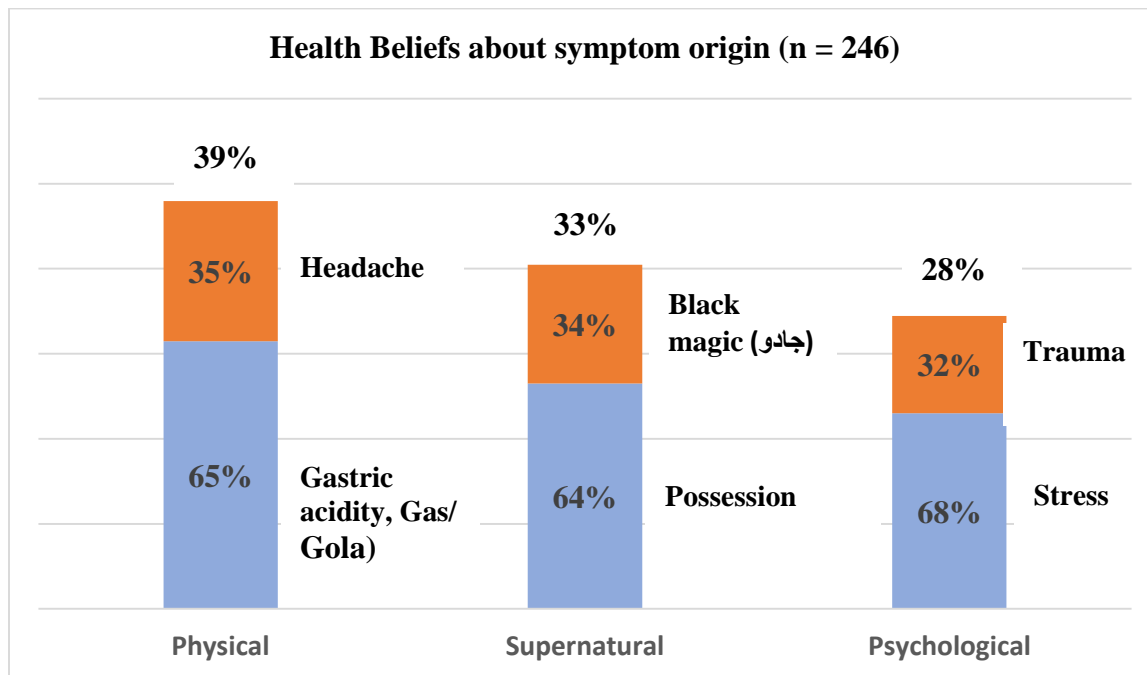
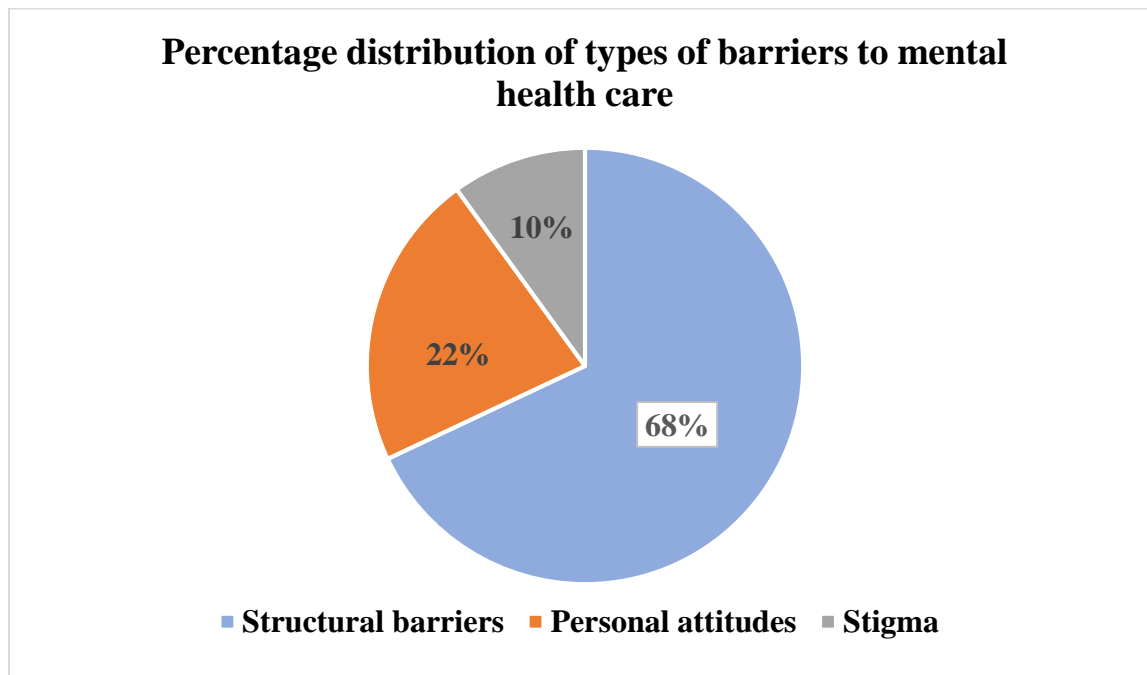


Figure 2 shows the percentage distribution of types of barriers to mental health care.

Amongst Structural barriers, patients commonly described financial difficulties (38.2%) and lack of easy availability of specialist resources in community (26.3%) The most frequently reported Attitudinal barriers were Low perceived need (36.1%) and Perceived ineffectiveness or side effects of psychiatric medications (22.4%). Stigma associated with psychiatric illnesses was present in 10% cases.

**Figure 2**

**Percentage distribution of types of barriers to mental health care**



The educational status, locality of residence and monthly family income were significantly associated with structural barriers to mental health care, as reported in Table 1.

Table 1 Association of socio-demographic characteristics and barriers to mental health care						
Variable	Structural Barriers n (%)	Attitudinal Barriers n (%)	Stigma related Barriers n (%)	Total n (%)	Chi square	P value
Gender						
Male	69 (72.6%)	20 (21.1%)	6 (6.3%)	95 (100%)	2.69	0.260
Female	99 (65.6%)	33 (21.9%)	19 (12.6%)	51 (100%)		
Educational level						
No formal education	36 (81.8%)	6 (13.6%)	2 (4.5%)	44 (100%)	46.61	<0.001
Primary education	79 (87.8%)	10 (11.1%)	1 (1.1%)	90 (100%)		
Secondary education	27 (52.9%)	16 (31.4%)	8 (15.7)	51 (100%)		
Tertiary education	26 (42.6%)	21 (34.4%)	14 (23%)	61 (100%)		
Marital status						
Single	51 (67.1%)	21 (27.6%)	4 (5.3%)	76 (100%)	13.62	0.079
Married	88 (73.9%)	15 (12.6%)	4 (5.3%)	119 (100%)		
Widowed/ Divorced	29 (56.9%)	17 (33.3%)	5 (9.8%)	51 (100%)		
Locality of residence						
Rural	109 (76.8%)	19 (13.4%)	14 (9.9%)	142 (100%)	13.95	<0.001
Urban	59 (56.7%)	34 (32.7%)	11 (10.6%)	104 (100%)		
Monthly Family income (in PKR)						
<15K	81 (94.2%)	3 (3.5%)	2 (2.3%)	86 (100%)	45.12	<0.001
15-30K	61 (59.8%)	29 (28.4%)	12 (11.8%)	102 (100%)		
>30K	26 (44.8%)	21 (36.2%)	11 (19%)	58 (100%)		

## DISCUSSION

In Pakistan, various psychosocial determinants affect the pathway to mental health care. Our findings highlighted the role of the health belief model in shaping the beliefs of patients about symptom origin; the common structural, attitudinal and stigma related barriers experienced by vulnerable population were also reported.

An international review article on mental health literacy showed that the general public is unlikely to identify symptoms of mental illnesses, attributing them to physical causes instead.<sup>12</sup> This makes them less likely to seek professional help from psychiatric services. These findings are similar to our results, where the majority of patients (39%) believed in a physical origin of their mental health symptoms. A recent local study assessed the somatic symptoms reported by patients of depression, and the authors reported stomach and bowel problems to be significantly associated with depressive illness.<sup>13</sup> Gastric discomfort and acidity were also the most commonly reported physical explanation of psychological symptoms in our study.

Amongst our participants, 32.9% believed their mental illness to be a result of black magic or possession by a supernatural being. Existing literature<sup>14</sup> in the Middle East supports our findings; Supernatural causes of mental illnesses were commonly reported amongst most Arab populations. An explanation might be the religious teachings and cultural norms which deeply influence the community's beliefs about the nature and causes of mental illnesses. Similarly, a qualitative study carried out through structured interviews in the Kalasha community in Pakistan reported how mental health is conceptualised according to the local cultural beliefs<sup>15</sup>. The perceived causes of mental health included biological and supernatural causes in this indigenous population; these findings are consistent with our results. Thus, it appears that the beliefs pertaining to mental health have congruent patterns of disease susceptibility and causes across local subcultures in Pakistan. We found 28% participants who attributed their psychological symptoms to stress or trauma. This matches the report of a local vignette based cross-sectional study where 23% respondents believed mental health professionals should be consulted for similar problems.<sup>16</sup>

The utilisation of mental health services in low and middle-income countries remains inadequate. A comprehensive review article described structural barriers as a significant theme that limits access to mental health care. The prohibitive services, transportation difficulties and inadequately staffed hospitals were emergent issues of concern.<sup>17</sup> We reported similar findings where 68% of

our patients were unable to utilise mental health services citing hospital expenses and laborious transport options to reach distant treatment facilities as structural barriers.

One study explored the impact of low literacy on mental health service use and found that most undergraduate patients suffered from a double stigma of low literacy and mental illness.<sup>18</sup>

Structural barriers were also most commonly reported by those of our patients with no formal education or only primary school completion. This appears to limit the access of uneducated patients to mental health care and has a negative impact on their mental well-being, treatment, and recovery.

Other authors found this problem to be magnified in rural and remote socially disadvantaged areas, particularly for patients with severe mental illnesses.<sup>19</sup> The locality of residence and monthly family income was also significantly associated with the structural barriers in our study; the rural based population was most affected by financial constraints and absence of equitable, convenient access to specialist services.

In terms of attitudinal barriers, 22% of our sample population shared low perceived need and perceived ineffectiveness/ side effects of medications as factors that make them hesitant to try seeking professional care. Local authors have previously reported that the mistrust of patients towards the available psychiatric interventions leads them to using community based traditional practitioners who may provide more culturally acceptable interventions.<sup>3,9</sup>

Many international studies<sup>20,21</sup> have found lower educational levels, rural living and financially disadvantaged settings to increase attitudinal barriers to seeking professional mental health care, which is congruent with our research findings. The misconceptions about mental illnesses, labeling mentally ill as weak and fear of psychiatric treatments can be higher in this vulnerable group of patients.

Social stigma associated with psychiatric illnesses was found in 10% of our patients. Other authors<sup>9,22</sup> have highlighted the impact of stigma and feelings of shame, which leads to reduction in accessing appropriate mental health services. The stigma can extend from personal beliefs about mental illness to discriminatory actions by others, leading to social exclusion of affected individuals. Being illiterate and distant from mental health services have been cited as risk factors for worsening stigmatising attitudes and behaviours.<sup>14,23</sup>

We did not find gender or marital status to have a significant association with common barriers to care, despite some authors <sup>24</sup> reporting a gender disparity in this regard. This may be explained on account of the treatment provision protocol of our study venue; all patients who are beneficiaries of the hospital trust are provided medications free of cost which could have removed most financial burden related to accessing mental health services for both male and female patients.

**Limitations and Recommendations:** Our study was based on a semi-structured interview to elicit health belief model and barriers to care; adding a comprehensive qualitative analysis would generate more detailed insight into the patient's experiences. Moreover, studies with formal sample size calculation, larger participant pool and broadening the scope to include patients from psychiatric facilities in different localities may also be useful in allowing better generalisation of findings.

## CONCLUSION

Patients with low literacy rates, rural based living and socioeconomic disadvantage are more likely to report structural and attitudinal barriers to mental health care. Strategies to address these barriers within this vulnerable population can help improve the utilisation of mental health services.

**Conflict of interest:** None

**Funding disclosure:** None


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### **AUTHORS UNDERTAKING FORM**

Serial no.	Author's name	Affiliation of Author	Contribution	Signature
1.	Dr Sawera Mansoor	Assistant Professor at Department of Psychiatry, Foundation University Islamabad	Conceptualization of the study, Collection and Interpretation of data, Drafting the manuscript and Final revision	
2.	<u>Taskeen Mansoor</u>	Lecturer at Department of Social and Behavioral Sciences, National University of Medical Sciences, Rawalpindi	Conceptualization of the study, Interpretation of data, Drafting the manuscript and Final revision	