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Prevalence of common mental disorders and perspective toward mental health in an urban resettlement colony of Delhi, India: A mixed-method study

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Abstract:

BACKGROUND: The paucity of community-based research and misunderstandings surrounding mental illness in low- and middle-income countries impede the provision of proper care in this domain. The objective of this research was to assess the prevalence of common mental disorders in an urban resettlement colony in Delhi, India, explore associated factors, and understand the community's perspective on mental health.

MATERIALS AND METHODS: A community-based mixed-method study was conducted in which 130 participants were selected through multistage systematic random sampling and 12 key community members by purposive sampling. To assess the prevalence of common mental disorders, the 20-item Self-Reported Questionnaire (SRQ-20) was used, while the community's viewpoint on mental illness was explored using an in-depth interview guide. The odds ratio (OR) for risk factors was calculated using Pearson's Chi-square test, Fisher's exact test, and multiple logistic regression. For the qualitative component, themes were analyzed and presented.

RESULTS: The study found an 18.5% prevalence of common mental disorders in the area. Socioeconomic status, hypertension, chronic health conditions, and the impact of the coronavirus disease 2019 (COVID-19) pandemic on personal life were significant predictors (P < 0.05). The qualitative study identified that community members have a negative perspective on mental illness. Women are a vulnerable group because of their susceptibility to violence and certain cultural factors.

CONCLUSION: Insufficient knowledge and societal stigmatization act as barriers to accessing mental health services. Certain groups, such as people of lower socioeconomic strata, living with a chronic disease are more affected. Targeted interventions are required to address these effectively.

Kevwords

Anxiety disorders, mental health, mental health associations, mood disorders, prevalence, qualitative research

Introduction

Mental health is often not a priority in low- and middle-income countries because of limited resources, competing health priorities, and a lack of awareness.^[1] Cultural beliefs and norms frequently act as barriers that discourage patients and

family members from accessing healthcare services. ^[2] Limited research and a lack of data on mental health often make it challenging to advocate for resources in the healthcare system. Mental health worsened during the coronavirus disease 2019 (COVID-19) pandemic because of associated social and economic disruptions, such as the closure

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Received: 29-09-2023 Accepted: 05-03-2024 Published: 28-09-2024 of educational institutes, fear of contracting the disease, grief for the loss of loved ones, financial and economic challenges, stress anxiety, and limited access to health facilities. [3-5] With this background, the objectives of the study were twofold: to ascertain the prevalence of common mental disorders and associated factors in an urban resettlement colony in East Delhi and to gain insight into the community's perspective on mental health, including contributing factors, recognizable signs and symptoms, available treatment options, and prevalent myths and misconceptions.

Materials and Methods

Study design and setting

A community-based mixed-method study with both quantitative and qualitative components was conducted in Nand Nagari, an urban resettlement colony in East Delhi. A resettlement colony is created by removing a group of households from a congested city core or an encroachment in public places and locating them generally in the periphery of the city with few civic amenities provided. Nand Nagari has a population of approximately 65,000 and is subdivided into five blocks and 21 sub-blocks; each sub-block has approximately 477 households.

For the quantitative component of the study, a total of 130 participants were recruited based on the proportion (*P*) of common mental disorders as 20%, ^[2] margin of error as 7%, and confidence level as 95%. All adults (aged 18–59 years) residing in an urban resettlement colony of Nand Nagari for the last 6 months were included in the study. All others, and who failed to give informed consent, were excluded from the study.

A multistage systematic random sampling technique was used to identify participants. Three sub-blocks were selected, and 44 households were chosen from each selected sub-block. A sampling interval of 11 was calculated, and one adult (18–59 years) was randomly selected from each selected household.

For the qualitative investigation, a total of 12 in-depth interviews with key community members were conducted. The participants were chosen using purposive sampling. The profiles of the key community members are in Table 1.

Data collection

For the quantitative component of the study, the 20-item Self-Reported Questionnaire (SRQ-20) scale, available in the local language of Hindi and developed by the World Health Organization (WHO), was utilized to find out the prevalence of common mental disorders. It consists of 20 questions on a scale of 0 to 1 concerning

Table 1: Profile of the key community members (n=12)

Participants	Gender	Occupation	
Medical practitioners	Male: 4	Physiotherapist: 1	
		Bachelor of Homeopathic Medicine and Surgery (B.H.M.S): 1	
		Traditional healer: 1	
		Allopathic practitioner (MBBS): 1	
ASHA (Accredited Social Health Activist)*	Female: 4	ASHA workers	
Other key community members	Male: 4	Teacher: 1	
		Priest (Hindu temple): 1	
		Police sub-inspector: 1	
		Police sub-inspector: 1	

*ASHA=Community Health Workers employed by the Ministry of Health and Family Welfare, Government of India

cognitive symptoms, depression, anxiety, and somatic symptoms. A score of 7 or higher was used to determine the presence of a common mental disorder. At a cut-off of 7 (value > =7), it has a sensitivity of 83% and specificity of 83%.^[6] It has Cronbach's alpha of 0.784.^[7] A semi-structured interview schedule was used to find out the profiles of the study participants. The participants were also asked about contributing factors, recognizable signs and symptoms, available treatment options, and any beliefs and practices related to mental health. The impact of the COVID-19 pandemic on personal life was defined as strained relationships among family members, an inability to connect with close friends, and loneliness.^[8,9] The impact on professional life included decreased income, increased work burden, and an inability to pursue further education.[10,11]

For the qualitative component, an in-depth interview guide was used to explore the perspectives of the community members regarding mental health. It was semi-structured, and the questions were open-ended. The broad domains were contributing factors for the development of mental illnesses: sociocultural beliefs and practices, identification, management, policy, and program environment.

The questionnaires were translated and back-translated into the local language and pilot-tested.

Data collection was conducted between January 2021 and February 2022.

Statistical analysis

The quantitative data were analyzed using SPSS Statistics version 20 (IBM Corp. Released 2011. IBM SPSS Statistics for Windows, version 20.0. Armonk, NY: IBM Corp.). The prevalence of common mental disorders was the primary outcome. The statistical tests used were Pearson's Chi-square test, Fisher's exact test, and

multiple logistic regression. A P < 0.05 was considered statistically significant. For in-depth interviews, the investigator recorded, transcribed verbatim, and translated the interview. Two investigators independently did the coding, one of whom was a qualified psychiatrist with more than two decades of experience working in mental health. After coding, we engaged in a process of grouping and organizing codes that shared commonalities to form higher-level themes. These themes captured overarching concepts that emerged from the data, reflecting the key points of discussion and participant viewpoints, and were reported.

Ethical consideration

Written informed consent from all participants was obtained. Data privacy and confidentiality were ensured. Participants who screened positive for the common mental disorders were referred to the Department of Psychiatry of the associated hospital. The institutional ethics committee of the associated hospital approved the study. After data collection was completed, awareness and sensitization sessions were held in the study area. Post-interview discussion sessions were also held with the participants of the qualitative component of the study, that is, identified key community members.

Results

Of the 130 participants in the quantitative study, 73 were male and 57 were female. The median age of the participants in the study was 35 (interquartile range (IQR): 25–46). Fifty-five percent (54.6%) were married, and the majority (88.5%) were of Hindu religion. A little more than half (56.9%) belonged to lower socioeconomic strata and around one-fifth (19.3%) were illiterate. Around 80% of the study population engaged in unskilled work as an occupation.

The prevalence of common mental disorders in the study area was determined to be 18.5%.

The association between common mental disorders and various socio-demographic factors is depicted in Table 2. The socio-demographic characteristics that had a statistically significant association with common mental disorders in the bivariate analysis were age-group (P 0.047), marital status (P 0.025), education of the individual (P 0.014), socioeconomic status of the family (P 0.001), presence of hypertension (P 0.004), chronic health conditions (P < 0.001), and impact of the COVID-19 pandemic on personal life (P 0.016).

Table 3 displays the results of the multiple logistic regression performed, including factors that were significant in the bivariate analysis. Socioeconomic status (odds ratio (OR)

= 9.75, P 0.04), hypertension (OR = 7.148, P 0.004), the presence of a chronic health condition (OR = 18.0, P < 0.001), and the impact of the COVID-19 pandemic on personal life (OR = 3.5, P 0.018) were found to be significant predictors of common mental disorders.

Approximately 74.6% of the participants identified family conflict as a contributor to mental problems. Unemployment was cited by 13.8%, brain diseases by 12.3%, infections by 10.8%, and 9.2% reported "karma" from a previous life, and evil spirits played roles in mental health.

Approximately 47.7% of the participants reported social withdrawals, 44.6% reported sudden changes in behavior, and 35.6% associated aggressive behavior, such as abuse and combative behavior with mental health problems.

In the study, half of the participants reported that people make fun of mentally ill people; 58.5% said that people feel ashamed if a family member has a mental illness; and nearly one-third (33.8%) of participants said that people ignore mentally ill patients and do not take their problems seriously.

A significant majority (76.9%) of the study participants mentioned the availability of mental health services in "big" hospitals, whereas nearly one-fourth (23.1%) were unaware of the existence of any such services.

Perspectives of key community members: Themes identified by qualitative research

Core theme 1: Contributing factors COVID-19 pandemic

The COVID-19 pandemic has brought significant changes to people's daily lives. People were confined to their homes, anxious about their income, job security, and the well-being of themselves and their loved ones. The essential workers faced an increased workload, which had a negative impact on their mental health.

"Living inside the house for 24 hours and never going outside is affecting people mentally; their lifestyle has changed completely." (A teacher describes the change in life during the pandemic.)

"Disease prevalence is lower, but fear of the disease is higher." (Traditional healer)

"I can tell you about the police personnel who work here; they are unable to get proper rest because of multitasking. If you are doing such work, workers get frustrated." (A police sub-inspector describes an excess workload.)

Table 2: Presence of common mental disorders and associated socio-demographic factors

Socio-demographic factors	Total number (<i>n</i> =130)	Common mental disorders present number (%)	P (Chi-square)	
Age-group				
18–29 years	37	3 (8.1%)	0.047	
30-44 years	65	12 (18.5%)		
45–59 years	28	9 (32.1%)		
Marital status				
Married	71	14 (19.7%)	0.025*	
Unmarried	48	5 (10.4%)		
Widowed	11	5 (45.5%)		
Gender				
Male	73	11 (15.06%)	0.259	
Female	57	13 (22.8%)		
Religion				
Hindu	115	20 (17.4%)	0.477*	
Other religion	15	4 (26.6%)		
Education				
Illiterate	25	8 (32.0%)	0.014*	
Up to high school	52	12 (23.07%)		
Above high school	53	4 (7.5%)		
Occupation		(',		
Unskilled	104	22 (21.1%)	0.159*	
Skilled and above	26	2 (7.7%)	000	
Socioeconomic status		= (/3)		
Middle	54	3 (5.5%)	0.001	
Lower	76	21 (27.6%)	0.001	
Alcohol consumption	, 0	21 (27.676)		
Yes	24	5 (20.8%)	0.773	
No	106	19 (17.9%)	0.770	
Tobacco consumption	100	10 (17.576)		
Yes	37	109 (27%)	0.112	
No	93	14 (15.1%)	0.112	
Hypertension	30	14 (13.170)		
Yes	17	8 (47.1%)	0.004*	
No	113	16 (14.2%)	0.004	
Diabetes mellitus	110	10 (14.270)		
Yes	12	3 (25%)	0.463*	
No			0.463	
Chronic health conditions other than diabetes and hypertension	118	21 (17.8%)		
Yes	14	9 (64.3%)	< 0.001*	
No	116	15 (12.9%)		
Family history of mental disease		(12.070)		
Yes	11	3 (27.3%)	0.425*	
No	119	21 (17.6%)	0.420	
COVID-19 case in the family	110	21 (17.0%)		
Yes	14	3 (21.4%)	0.722*	
No	116	21 (18.1%)	0.122	
Impact of the pandemic on personal life	110	21 (10.170)		
Yes	48	14 (20 29/)	0.016	
res No	48 82	14 (29.2%)	0.016	
	02	10 (12.2%)		
Impact of the pandemic on professional life	0.4	46 (470/)	0.404	
Yes	94	16 (17%)	0.494	
No *Fisher's exact test	36	8 (22.2%)		

*Fisher's exact test

Table 3: Predictors of common mental disorders identified by multiple logistic regression

Predictors	β*	SE [†]	Adjusted odds ratio (95% CI [‡])	P
Socioeconomic status				
Lower	2.277	0.800	9.750 (2.0-46.7)	0.004
Middle			Reference level	
Hypertension				
Yes	1.967	0.677	7.148 (1.8-26.9)	0.004
No			Reference level	
Personal impact due to COVID-19				
Yes	1.263	0.580	3.5 (1.1-11.0)	0.018
No			Reference level	
Chronic health conditions other than hypertension and diabetes mellitus				
Yes	2.892	0.755	18.0 (4.1-79.1)	< 0.001
No			Reference level	
Final model				
Chi-square (df=5)			42.490	
P			< 0.001	
Hosmer-Lemeshow test			0.756	
Nagelkerke R ²			0.453	

^{*}β, regression coefficient; †SE, standard error; ‡CI, confidence interval

Constant broadcast of news about pandemics around the clock

The role of the news media in exacerbating fear was also cited as a factor in the increase in mental stress.

"Whenever one opens a new channel, from morning to night, we watch the same thing: who died, how many died, in how many families, what happened, and it has impacted all." (An allopathic doctor reported fear that resulted from watching COVID-19-related news.)

Women are susceptible to mental illness

The data revealed that women, due to their marginalized social status and hierarchical family structure, face increased vulnerability in the household, thereby categorizing them as a high-risk population for mental disorders.

"The husbands physically abuse the wives and engage in excessive drinking. Many times, wives are the breadwinners, but the money they earn quickly dissipates. As a result, these women experience tremendous distress and mental strain. Usually in the daytime, they continue to work and face all these problems at night." (An Accredited Social Health Activist (ASHA) worker describes domestic violence as a contributing factor to mental illness.)

"It is a Hindustani (Indian) culture that a girl has to live in her husband's house even if she is experiencing depression." (ASHA worker describes the necessity of women making sacrifices even if that may adversely affect mental well-being.)

Mental health and young people

Interviewees reported poverty, peer influence, and the availability of drugs as the reasons for addiction and

as having an effect on the mental well-being of youth and young children. The uncertainties associated with the pandemic regarding evaluation procedures among school students were also reported as a cause for mental disorders.

"Children in this locality often find themselves in an unfavorable environment, which comes with poverty. Consequently, they become involved in drug use, leading to addiction, which impedes their ability to pursue education. This addiction affects young people's mental health at an early age." (A police sub-inspector describes how drug abuse at a young age leads to mental illness later.)

"Students exhibit significant anxieties concerning their examination, and not knowing the schedule affects them the most." (A teacher describes examination stress and uncertainties seen among students.)

Individuals with chronic illnesses are more susceptible

Chronic health conditions, such as coronary heart disease, have been cited as a source of anxiety due to the uncertainty regarding progression and treatment outcomes. Chronic illness often requires significant lifestyle changes, such as dietary modifications, treatment adherence, and regular follow-up with the physician. The financial burden and fear of complications also become sources of anxiety.

"In every long-term illness like diabetes or heart disease, a person has been shown to multiple people and has to undergo multiple tests. In such a person, you will find a level of depression because, at the back of his mind, it keeps on going whether he will get cured or not, how many more tests he has to undergo, how many more places he has to visit." (Allopathic doctor)

Core theme 2: Available treatment options

The key community members reported a preference for visiting a traditional healer over qualified physicians. The reasons for preference were availability, affordability, cultural associations, and the conviction that the medication they offered had no side effects. Access to hospitals is also hindered by the behavior of hospital staff. It was also reported that individuals often hold the belief that psychiatric medications can modify a person's personality. Some also believed that mental disorders did not require treatment and would resolve with time.

"Here, people mainly go to Vaid (a practitioner of ayurvedic medicine). They are good value for money." (Physiotherapist)

"People do not want to take medicines, thinking medicines will affect the brain and change the person." (Teacher)

"People believe that ayurvedic medicine is superior because it has no side effects." (Allopathic doctor)

"People have faith that if a situation is bad today, it will improve within six to twelve months. They believe that their mental health issues will improve on their own, so they do nothing and let time decide." (Physiotherapist)

Core theme 3: Existing beliefs about mental health and illness

Participants mentioned that society frequently refers to people who are receiving treatment for mental disorders as "pagal" (mad). This label affects employment opportunities and marriage prospects. Consequently, individuals and families tend to conceal the situation, resulting in a delay in seeking treatment. It was reported that mental illness cannot be cured, and society in general lacks compassion for those who suffer from it. The belief that evil spirits induce mental illness was reported.

"The tag (mentally ill) becomes permanent." (ASHA worker)

"Whoever is mentally ill is beyond repair." (Police sub-inspector)

"I keep a distance from such people; I feel that there is no benefit in helping them; today you will help them; tomorrow they will become the same; therefore, it is better to ignore them." (A police sub-inspector describes it as better to ignore mentally ill patients.)

"His (a person with mental illness) mother, instead of taking him to the hospital, is visiting tantra mantra people (persons who are engaged in occult rituals)." (An ASHA worker describes evil spirits and occult practices as causes of mental illness.)

The prevalent myths and misconceptions found through both the quantitative and qualitative components of the study are depicted in Figure 1.

Discussion

This is one of the few studies that has explored prevalence, associated factors, and community perspectives toward mental health in India.

The study's strength was the use of a community-based mixed-methods design, which provided a comprehensive

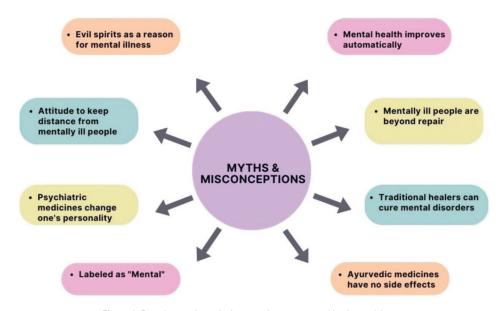


Figure 1: Prevalent myths and misconceptions as reported by the participants

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and nuanced understanding of the topic by providing not only statistical information but also experience, emotions, and attitudes related to mental health. This also enabled us to do data triangulation by comparing and contrasting results from different data sources and gain insight into local cultural beliefs, practices, and values that influence mental health perception in the community.

Limitations of the study include the fact that the SRQ-20 is a screening instrument and not a diagnostic instrument for common mental disorders. For the qualitative study, the instrument being an interview schedule, social desirability bias cannot be ruled out despite all precautions.

Contrary to some studies, the study found a higher prevalence of common mental disorders, 32.1%, in the older age category of 45–59 years. [2,12-14]

Similar to a few other studies, this study found a statistically significant association between common mental disorders, lower socioeconomic strata, [2,15-17] and the presence of chronic health conditions. [18-22]

The association between the COVID-19 pandemic's impact on personal life and the presence of common mental disorders was statistically significant. The same was reported in our qualitative study component. It was reported that sensational news coverage of the pandemic contributed to mental stress. During the pandemic, stress and anxiety associated with the increased workload of essential workers were cited as causes. Other studies have reported similar findings. [8,11,23,24]

The qualitative component of our study revealed that women are a vulnerable population to mental disorders because of their susceptibility to violence and certain cultural factors, similar to some other reports.^[25,26]

Similar to a few studies, [27-29] the quantitative and qualitative components of our study produced the finding that the majority of the community members have a negative perspective toward mental illness. The affected individuals are often ridiculed or mocked.

Despite the National Mental Health Program of the country emphasizing the integration of mental services with general health care, the study found that there is a lack of awareness within the community regarding this aspect.^[2] Other researchers have reported results that are similar.^[28,30]

This study revealed a significant issue concerning mental illness, namely the stigmatizing label attached to those deemed mentally ill. To address these, it is crucial to sensitize and target key community members who have the potential to influence public perceptions, and strategic interventions should be planned accordingly.

Conclusion

Mental health disparities exist in different populations, especially those that are marginalized or vulnerable, such as the urban poor and people with chronic health conditions. The findings of this study provide a deeper understanding of the prevalent myths and misconceptions in the given community. Essential mental health services should be effectively integrated into the primary healthcare system, emphasizing increasing community awareness of mental health issues. Key community members can serve as the link between the community and the healthcare system. The opportunity should also be used to screen chronically ill individuals for mental health problems. In addition, future community-based research can identify specific needs and contribute to the development of targeted strategies.

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Conflicts of interest

There are no conflicts of interest.

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