Review began 06/04/2023 Review ended 06/08/2023 Published 06/11/2023

#### © Copyright 2023

Jayan et al. This is an open access article distributed under the terms of the Creative Commons Attribution License CC-BY 4.0., which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

# Awareness and Practices of a Rural Community Regarding Mental Health Problems

Vivek Jayan<sup>1</sup>, S Vishwas<sup>1</sup>

1. Epidemiology and Public Health, Sri Devaraj Urs Academy of Higher Education and Research, Kolar, IND

Corresponding author: Vivek Jayan, thevivekjyn@gmail.com

#### Abstract

Introduction: Mental health is defined as "a state of well-being in which the person realizes his or her own skills, can deal with the normal stresses of life, can work effectively and fruitfully, and is able to make a contribution to his or her community." Although mental health is essential to human survival, it is often given less attention than physical health in many parts of the world.

Objectives: The aim of this study is to evaluate the rural community's awareness regarding mental health issues and the factors that contribute to them.

Materials and methods: A cross-sectional study was undertaken in the rural community; 350 study subjects were selected from the village of Devarayasamudra by using convenient sampling, 350 households were selected, and household-level interviews were done using the Mental Health Knowledge Schedule questionnaire. Participants aged more than 18 were included in the study, and locked households, even after two visits, were excluded from the study.

Results: The median aggregate knowledge score was 31 (SD = 7.1), with the minimum and maximum values being 11 and 44 out of 45 knowledge items, respectively. The total knowledge score found that 178 (50.8%) respondents had insufficient mental health knowledge based on the percentage of the study population with a cut-off score below and above the median score. A multivariate logistic regression analysis confirmed that participants who were illiterate had 1.76 (1.15-2.26) times the chances of having insufficient knowledge compared to professionals, and this remained true even after adjusting for other variables as well.

Conclusion: The present study concluded that more than 50% (50.8%) of the participants had inadequate awareness of mental health and mental illness. This highlights the need to spread awareness about mental health education among the general community.

Categories: Preventive Medicine, Psychiatry, Epidemiology/Public Health Keywords: stigma, rural, awareness, knowledge, mental health

### Introduction

Mental health is defined as "a state of well-being in which the person realizes his or her own skills, can deal with the normal stresses of life, can work effectively and fruitfully, and is able to make a contribution to his or her community" [1]. Mental health is essential to human life; however, many countries prioritize physical health over mental health. This may be due to mental health stigma [2]. People's awareness of mental health issues is limited to those that are more severe or manifest later in the disease's progression. It's possible that this is due to the prevalence of common symptoms such as hopelessness and anxiety or that people are merely ignorant of their existence [3-6].

Suicide is widespread among those suffering from mental illnesses, and among those aged 15 to 29, it is the fourth leading cause of death. People with serious mental health disorders are expected to die up to 20 years sooner than the normal population for curable physical reasons [7]. It is generally acknowledged that informing the public about major bodily illness prevention, early intervention, and treatment will benefit them. Many individuals know that safe sexual behavior reduces HIV risk, smoking causes many diseases, and a balanced diet is essential. People usually recognize the early indications of cancer, heart attacks, and strokes and may have taken a first-aid course to learn how to treat these and other medical emergencies. Early intervention needs this information. In contrast, many people don't know what they can do to avoid mental illnesses, are distrustful of suggested treatments, and don't know how they can help those who are suffering [8].

Most people in the community would avoid talking to someone with a history of mental illness, and even fewer would consider befriending them [9]. Many studies have shown that people who are labeled as mentally ill are seen in a less positive light and are more likely to be rejected, no matter what they do [10].

It is important to enhance community awareness of mental health issues, the availability of effective treatments for mental illness, and how to detect and treat these illnesses. [6] The study of the community's awareness, attitude, and health-seeking behaviors in relation to mental illness may help in the provision of

#### How to cite this article

Jayan V, Vishwas S (June 11, 2023) Awareness and Practices of a Rural Community Regarding Mental Health Problems. Cureus 15(6): e40263. DOI 10.7759/cureus.40263

mental healthcare services [8].

The purpose of this study is to assess the levels of mental health awareness and practices in rural communities, as well as the variables associated with them. "This article was previously presented as a poster at the 5th Amrita International Public Health Conference in December 2022 at the Amrita Institute of Medical Sciences in Kochi."

### **Materials And Methods**

#### Study design and settings

A cross-sectional method was used for this study, which was done in the rural regions of Devarayasamudra in the Kolar district of Karnataka, India. The study was conducted by visiting from house to house.

#### Study population

About 350 study participants were selected from the village of Devarayasamudra using a convenient sampling technique; 350 households were selected, and interviews with household members were conducted. Participants older than 18 were included in the study, and despite two visits, the locked household was excluded.

#### Study tools and measurements

To assess the sociodemographic profile, semi-structured questionnaires were used, and the adapted version of the Mental Health Knowledge Schedule (MAKS) [2] with a "yes" or "no" response was used to measure the community's knowledge of mental health problems. During the calculation of the median score for knowledge-based queries, a cut-off point below and above the median score was considered in order to determine the proportion of community members with abundant and insufficient knowledge.

### Data analysis

The collected data were cleansed, coded, entered in Microsoft Excel (Microsoft, Washington, USA) and exported to SPSS Statistics version 22 (IBM Corp. Released 2013. IBM SPSS Statistics for Windows, Version 22.0. Armonk, NY: IBM Corp.) for analysis. To summarize the dependent and independent variables, descriptive statistics were conducted. Using the logistic regression analysis model, the factors associated with the outcome variable were identified.

#### Ethical clearance

Institutional ethical committee approval was obtained (No. DMC/KLR/IEC/392/2022-23).

### **Results**

### Sociodemographic characteristics

A total of 350 study participants were successfully interviewed. The respondents' mean age was 44.36 (SD 16.9). The majority of participants in the study were men (193, 55.1%), married (271, 77%), and from nuclear families (223, 63%). Furthermore, according to the modified BG Prasad classification, the majority of the study participants belonged to the class 1 socioeconomic classification, and 309 of the participants were Hindu by religion. Furthermore, 30% of the participants only had a high school education (Table 1).

|  |                       | Frequency | (%) |
|--|-----------------------|-----------|-----|
| Sex  | Male                  | 193       | 55  |
|  | Female                | 157       | 45  |
| Age  | 44.36 (SD ± 16.9)     | -         | -   |
| Type of family<br>Socioeconomic classification (Modified BG Prasad 2021) | Nuclear family        | 223       | 63  |
|  | Joint/extended family | 127       | 37  |
|  | Class 1               | 118       | 33  |
|  | Class 2               | 94        | 27  |
|  | Class 3               | 74        | 21  |
|  | Class 4               | 43        | 12  |
|  | Class 5               | 18        | 5   |
|  | Hindu                 | 309       | 88  |

| Religion  | Christian                | 19  | 5  |
|---|--------------------------|-----|----|
|   | Others                   | 22  | 7  |
|   | Unable to read and write | 60  | 17 |
|   | Primary school           | 33  | 9  |
|   | Middle school            | 31  | 8  |
| Educational status  | High school              | 105 | 30 |
|   | Diploma                  | 58  | 16 |
|   | Graduate                 | 43  | 12 |
|   | Professional degree      | 20  | 5  |
|   | 1 <sup>st</sup> child    | 160 | 46 |
|   | 2 <sup>nd</sup> child    | 115 | 33 |
| Birth order   | 3 <sup>rd</sup> child    | 52  | 14 |
|   | 4 <sup>th</sup> child    | 7   | 2  |
|   | More than 4              | 14  | 5  |
|   | Unemployed               | 60  | 17 |
|   | Unskilled                | 33  | 9  |
|   | Semiskilled              | 31  | 8  |
| Occupational status                                       | Skilled                  | 105 | 30 |
|   | Clerical/shop/farm       | 58  | 16 |
|   | Semi-professionals       | 43  | 12 |
|   | Professional             | 20  | 5  |
|   | Married                  | 271 | 77 |
| Marital Status  | Unmarried                | 70  | 20 |
|   | Divorced                 | 1   | 3  |
|   | Widowed                  | 8   | 2  |
|   |                          |     |    |
|   |                          |     |    |
| TABLE 1: Sociodemographic characteristics of participants |                          |     |    |

### **Respondents' mental health awareness**

Nearly three-quarters (73%) of respondents know that mental illness is a type of medical disease, and nearly two-thirds (68.5%) know that mental health problems can be managed. In contrast, 31.7% of those surveyed believed mental illnesses were infectious, and 41.7% recommended isolation as a therapeutic option. In addition, over half of those polled (202 or 57.7%) disagreed that men and women experience the same kind of mental health issues. Participants listed aggression or violence (86%) and hearing or seeing objects that aren't there (83%) as major symptoms of mental illness (Table 2).

| Variables   | Characteristics                | Frequency | Percentage |
|---|--------------------------------|-----------|------------|
|   | Genetic reasons                | 173       | 49.4%      |
|   | Stress/tension                 | 237       | 67.71%     |
|   | Accident/Injury                | 248       | 70.85%     |
|   | Brain functional abnormality   | 250       | 71.42%     |
|   | Family conflict                | 236       | 67.42%     |
| Mental illness is due to  | Conflict in family             | 227       | 64.85%     |
|   | Worrying much                  | 240       | 68.57%     |
|   | Neurotransmitter imbalances    | 220       | 62.85%     |
|   | Witchcraft                     | 169       | 48.28%     |
|   | God's punishment for past sins | 177       | 50.57%     |
|   | Possession of evil spirit      | 157       | 44.85%     |
|   | Personal weakness              | 155       | 44.28%     |
|   | Bad nutrition                  | 182       | 52.00%     |
|   | Polluted atmosphere            | 131       | 37.42%     |
|   | Traditional                    | 100       | 28.57%     |
| Mental illness can be treated   | Religious                      | 96        | 27.42%     |
|   | Medical                        | 286       | 81.71%     |
| Professional counseling may help mental disease patients                        | -                              | 283       | 80.85%     |
| Mental disorders can be effectively treated with medication                     | -                              | 312       | 89.14%     |
| Mental illness requires psychiatric facility treatment                          | -                              | 286       | 81.71%     |
| Mental illness can be managed by families at home                               | -                              | 205       | 58.57%     |
| Psychiatric disorders should be treated by witch physicians                     | -                              | 170       | 48.57%     |
| Marriage can cure psychological disorders                                       | -                              | 199       | 56.85%     |
| Free mental health care is freely available at all government health facilities | -                              | 246       | 70.28%     |
| Govt had dedicated counselors and support programs for mental illness           | -                              | 264       | 75.42%     |

### TABLE 2: Knowledge of the respondents regarding mental health and mental health problems

#### Overall awareness level of the study participants

The median score for knowledge was 31, with the lowest score being 11 and the highest score being 44 out of 45 knowledge items. The total knowledge score revealed that 178 (50.8%) respondents had insufficient knowledge regarding mental health issues. This was determined by calculating the percentage of the study population that scored below and above the median level. Variables such as gender, age, degree of education, marital status, and employment were incorporated into the bivariate logistic regression analysis. With a P-value of less than 0.05, it was determined that education level and occupation were statistically significant determinants of mental health knowledge. Finally, multivariate logistic regression analysis confirmed that participants who were illiterate had 1.76 (1.15-2.26) times the chances of having insufficient knowledge compared to professionals, and this remained true even after adjusting for other variables as well. Even after controlling for confounding factors, those with a skilled occupational status had 1.87 times the chance of having insufficient knowledge as those with a professional level (Table 3).

| Variables           | Category                  | Knowledge of mental health problems |             |                      | AOP                 |
|---------------------|---------------------------|-------------------------------------|-------------|----------------------|---------------------|
|                     |                           | Inadequate                          | Adequate    |                      | AUN                 |
| Sex                 | Male                      | 92 (47.7%)                          | 101 (52.3%) | 0.752 (.493-1.147)   |                     |
|                     | Female                    | 86 (54.8%)                          | 71 (45.2%)  | 1                    |                     |
| Age                 | 18-31                     | 46                                  | 75          | 1.12 (0.86- 1.75)    |                     |
|                     | 31-49                     | 80                                  | 68          | 0.82 (0.48-1.13)     |                     |
|                     | Above 50                  | 52                                  | 29          | 1                    |                     |
| Marital status      | Married                   | 123                                 | 148         | 1.16 (0.60 -1.80)    |                     |
|                     | Unmarried/widow/separated | 55                                  | 24          | 1                    |                     |
|                     | Unable to read and write  | 44                                  | 16          | 1.76 (1.15-2.26)**   | 1.81 (1.28-2.38) ** |
|                     | Primary school            | 7                                   | 26          | 1.46 (0.86- 1.98)    | 1.53 (0.89- 2.15)   |
|                     | Middle school             | 23                                  | 8           | 0.89 (0.42- 1.26)    | 0.99 (0.62- 1.39    |
| Level of education  | High school               | 54                                  | 51          | 0.55 (0.36- 1.05)    | 0.72 (0.42- 1.20)   |
|                     | Diploma                   | 40                                  | 18          | 0.63 (0.33-0.96) **  | 0.46 (0.26-0.82) ** |
|                     | Graduate                  | 6                                   | 37          | 0.98 (0.67-1.16)     | 0.86 (0.47-1.09     |
|                     | Professional degree       | 4                                   | 16          | 1                    | 1                   |
| Occupational status | Unemployed                | 8                                   | 26          | 1.55 (0.89- 2.12)    | 1.44 (0.74-1.96)    |
|                     | Unskilled                 | 12                                  | 36          | 1.72 (1.05- 2.84) ** | 1.79 (1.12-2.75)**  |
|                     | Semiskilled               | 14                                  | 20          | 1.62 (0.95-2.12)     | 1.48 (0.86-1.94)    |
|                     | Skilled                   | 16                                  | 11          | 1.87 (1.16-2.56) **  | 1.75 (1.05-2.28)**  |
|                     | Clerical/shop             | 26                                  | 20          | 1.04 (0.86-1.68)     | 1.15 (0.96- 1.78)   |
|                     | Semi-professionals        | 52                                  | 34          | 1.16 (0.84-1.48)     | 1.04 (0.75-1.57)    |
|                     | Professional              | 50                                  | 25          | 1                    | 1                   |

TABLE 3: Factors related to mental health and mental health issues

### Discussion

More than 50% (50.8%) of the participants in the present study held only a fundamental understanding of mental health and mental illness.

Ganesh reported a similar kind of outcome in New Delhi, India, in 2011 by performing a cross-sectional study to measure the knowledge, attitude, and behavior surrounding mental disease and showing that general public awareness of mental illness was relatively inadequate [11]. Similarly, in Nigeria, Gureje et al. found that negative perceptions about mental illness were prevalent, with as many as 96.5% feeling that people with mental illnesses are hazardous due to their aggressive behaviors. Most people would not accept even basic social relations with a mentally ill person: 82.7% would be scared to talk to one, and only 16.9% would contemplate marrying one [12].

The present study observed that education level and occupation were statistically significant determinants of mental health knowledge, and the participants who were illiterate had 1.76 (1.15-2.26) times the odds of having insufficient knowledge compared to professionals; this was similar to another Nigerian study conducted by Kabir et al. among 250 adults that observed that literate respondents were seven times more likely to exhibit positive emotions toward the mentally ill as compared to non-literate subjects, and they also found that the most common symptoms proffered by respondents as manifestations of mental illness included aggression or destructiveness (22.0%) and loquaciousness (21.2%). About 46% of respondents favor standard medical care for the mentally ill, while 34% are more inclined toward spiritual healing [13].

In 2019, Abolfotouh et al. conducted a cross-sectional survey on 650 Saudi adults, and they found that the majority of the Saudi public reported a lack of knowledge about the nature of mental illness (87.5%), negative perception (59%), negative attitudes to mental illness (66.5%), and negative attitudes to

professional help-seeking (54.5%) [14]. Although there is a significant prevalence of mental health disorders that affect every society in every region of the world, less focus and attention have been placed on finding effective solutions to close the knowledge gap, as evidenced by the general lack of information present across all research. This study suggests that the development of mental illness involves a complex interaction between biological, psychological, and cultural factors. In northern Ethiopia, Abbay et al. found that the level of mental health knowledge among the participants was low. They additionally found that factors such as being male, having a higher level of education, and having strong levels of social support were independent predictors of good mental health and community mental health knowledge, with both studies using the same questionnaire to assess the knowledge [15].

Furthermore, South African research uncovered religious and cultural explanations for the causes of mental illness [16]. The representation of the causes of mental illness in different countries may be different for a variety of reasons, including socioeconomic status, illiteracy rates, and the urban-rural study context. Respondents to the study almost unanimously agreed that chatting or laughing to oneself, as well as acting in a strange or unusual manner, are symptoms of mental illness [17]. The findings of research carried out in India are in agreement with this. Most of the people who answered this poll said they treated mental illness with a mix of medical, religious, and traditional methods. This is similar to the research done in Saudi Arabia [2]. Comparable to research conducted in New Zealand, nearly 80% of the participants in this study reported that mental illness is treatable [18].

The limitations of the study are that the cross-sectional structure of the data does not enable a rigorous causal interpretation of the findings. The present study assessed knowledge of mental illness by employing MAKS questionnaires, which were sensitive to memory bias. Although the study was representative of the general population, nonresponses may have had levels of knowledge and attitudes around mental illness and mental health help-seeking that were different from those of responders. It is possible, albeit difficult, to forecast how this may have impacted the results.

### Conclusions

The present study concluded that more than 50% (50.8%) of the participants had inadequate awareness of mental health and mental illness. This highlights the need to spread awareness about mental health education among the general community. Early identification of mental disorders, improved mental health outcomes, and increased use of health services may result from increased knowledge about mental health and mental disorders, better awareness of how to seek help and treatment, and reduced stigma against mental illness at the individual, community, and institutional levels.

## **Additional Information**

#### **Disclosures**

Human subjects: Consent was obtained or waived by all participants in this study. Institutional Ethics Committee issued approval DMC/KLR/IEC/392/2022-23. 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.

### References

- 1. Mental Health. Accessed: July 12, 2022: https://www.paho.org/en/topics/mental-health.
- Tesfaye Y, Agenagnew L, Anand S, et al.: Knowledge of the community regarding mental health problems: a cross-sectional study. BMC Psychol. 2021, 9:106. 10.1186/s40359-021-00607-5
- Gautham MS, Gururaj G, Varghese M, et.al: The national mental health survey of India (2016): prevalence, socio-demographic correlates and treatment gap of mental morbidity. Int J Soc Psychiatry. 2020, 66:361-72.
- 4. Böge K, Zieger A, Mungee A, et al.: Perceived stigmatization and discrimination of people with mental illness: a survey-based study of the general population in five metropolitan cities in India. Indian J Psychiatry. 2018, 60:24-10. 10.4103%2Fpsychiatry.IndianJPsychiatry\_406\_17
- Stigma attached to Covid can cause more deaths: AIIMS head. (2020). Accessed: July 19, 2022: https://timesofindia.indiatimes.com/india/stigma-attached-to-covid-can-cause-more-deaths-aiimshead/articleshow/75335....
- Salve H, Goswami K, Sagar R, Nongkynrih B, Sreenivas V: Perception and attitude towards mental illness in an urban community in South Delhi - a community based study. Indian J Psychol Med. 2013, 35:154-8. 10.4103/0253-7176.116244
- 7. Mental health. Accessed: July 12, 2022: https://www.who.int/health-topics/mental-health.
- Jorm AF: Mental health literacy: empowering the community to take action for better mental health . Am Psychol. 2012, 67:231-43. 10.1037/a0025957
- Fayyad J, Sampson NA, Hwang I, et al.: The descriptive epidemiology of DSM-IV Adult ADHD in the World Health Organization World Mental Health Surveys. Atten Defic Hyperact Disord. 2017, 9:47-65. 10.1007/s12402-016-0208-3
- 10. Knowledge and attitude of mental illness among general public of southern India. (2011). Accessed: July 13,

2022: https://www.njcmindia.com/index.php/file/article/view/1873/1552.

- 11. Ganesh K: Knowledge and attitude of mental illness among general public of southern India. Natl J Community Med. 2011, 2:175-8.
- Gureje O, Lasebikan VO, Ephraim-Oluwanuga O, Olley BO, Kola L: Community study of knowledge of and attitude to mental illness in Nigeria. Br J Psychiatry. 2005, 186:436-41. 10.1192/bjp.186.5.436
- Kabir M, Iliyasu Z, Abubakar IS, Aliyu MH: Perception and beliefs about mental illness among adults in Karfi village, northern Nigeria. BMC Int Health Hum Rights. 2004, 4:3. 10.1186/1472-698X-4-3
- Abolfotouh MA, Almutairi AF, Almutairi Z, Salam M, Alhashem A, Adlan AA, Modayfer O: Attitudes toward mental illness, mentally ill persons, and help-seeking among the Saudi public and sociodemographic correlates. Psychol Res Behav Manag. 2019, 12:45-54. 10.2147/PRBM.S191676
- Gebrekidan Abbay A, Tibebe Mulatu A, Azadi H: Community knowledge, perceived beliefs and associated factors of mental distress: a case study from northern Ethiopia. Int J Environ Res Public Health. 2018, 15:2423. 10.3390/ijerph15112423
- Hugo CJ, Boshoff DE, Traut A, Zungu-Dirwayi N, Stein DJ: Community attitudes toward and knowledge of mental illness in South Africa. Soc Psychiatry Psychiatr Epidemiol. 2003, 38:715-9. 10.1007/s00127-003-0695-3
- 17. Sneha CR, Reddy MM, Nongmeikapam M, Narayana JS: Awareness and attitude toward mental illness among a rural population in Kolar. Indian J Soc Psychiatry. 2019, 35:69-74.
- 18. Attitudes of adults towards people with experience of mental distress: findings from the 2015 New Zealand Mental Health Monitor. (2017). Accessed: October 27, 2022:

 $https://www.researchgate.net/publication/322927993\_Attitudes\_of\_adults\_towards\_people\_with\_experience\_of\_mental\_distributes\_of\_adults\_towards\_people\_with\_experience\_of\_mental\_distributes\_of\_adults\_towards\_people\_with\_experience\_of\_mental\_distributes\_of\_adults\_towards\_people\_with\_experience\_of\_mental\_distributes\_of\_adults\_towards\_people\_with\_experience\_of\_mental\_distributes\_of\_adults\_towards\_people\_with\_experience\_of\_mental\_distributes\_of\_adults\_towards\_people\_with\_experience\_of\_mental\_distributes\_of\_adults\_towards\_people\_with\_experience\_of\_mental\_distributes\_of\_adults\_towards\_people\_with\_experience\_of\_mental\_distributes\_of\_adults\_towards\_people\_with\_experience\_of\_mental\_distributes\_of\_adults\_towards\_people\_with\_experience\_of\_mental\_distributes\_of\_adults\_towards\_people\_with\_experience\_of\_mental\_distributes\_of\_adults\_towards\_people\_with\_experience\_of\_mental\_distributes\_of\_adults\_towards\_people\_with\_experience\_of\_mental\_distributes\_adults\_towards\_people\_with\_experience\_of\_mental\_distributes\_distribut$