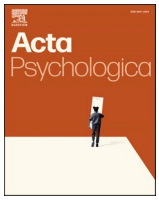
Acta Psychologica 255 (2025) 104958

Contents lists available at ScienceDirect

Acta Psychologica

journal homepage: www.elsevier.com/locate/actpsy



Community perception towards mental illness and associated determinants in Addis Ababa, Ethiopia: A community-based study

Genanew Kassie Getahun [a,*], Melkamu Kebede Chefo [b], Wubet Dessie Amberbir [a], Teklu Assefa Engida [a]

[a] Menelik II Medical and Health Science College, Addis Ababa, Ethiopia
[b] Black Lion Specialized Hospital, Addis Ababa, Ethiopia

ARTICLE INFO

Keywords:
Mental illness
Community perception
Mental health
Ethiopia

ABSTRACT

Background: There are numerous myths and beliefs about mental illness that may run against scientific truths and perspectives, and the way that the community perceives mental illnesses varies across societies and cultures. Therefore, the aim of this study was to assess community perception towards mental illnesses and associated factors in Addis Ababa, Ethiopia, in 2022.

Methods: A community-based cross-sectional study using a multistage sampling technique was conducted in the community of Addis Ababa, Ethiopia. A structured and pretested questionnaire was utilized to collect data from the 626 study participants. To find variables linked to community perception towards mental illnesses, a bivariable and multivariable logistic regression analysis model was carried out. Significant factors were identified with a p-value <0.05 and a 95 % confidence interval.

Results: According to the finding of this study 315 study participants (50.3 %) had a poor perception towards mental illness. It was discovered that having a negative perception of mental illness was related to being between the ages of 30–39 (AOR = 1.8, 95 % CI, 1.11–2.97), getting information from friends (AOR = 0.25, 95 % CI, 0.07–0.84), and working as a merchant (AOR = 1.86, 95 % CI, 1.06–3.2).

Conclusions: A significant proportion of population has an unfavorable opinion of mental illnesses. Additionally, participants between the ages of 30–39, mental health information from friends, and merchant occupation were statistically significant variables. Therefore, interventions aimed at adults, peer influencers and merchants might be more successful in reducing negative attitudes of population towards mentally ill individuals.

1. Introduction

Mental well-being is an indicator of social life and a key component of the general health of people, societies, and countries (Shumye et al., 2021). In the majority of the world, mental illnesses are mostly ignored and neglected, which widens the treatment gap and adds to the burden of mental illness on society (Choudhry et al., 2016). This could be partly attributed to the widespread misconceptions and incorrect assumptions that exist about mental illness throughout the world (Pangiras et al., 2021). The lifetime prevalence of mental disorders among adult is estimated to be 12.2–48.6 % globally, with a range of 8.3 % to 29.1 % for each year (Boti et al., 2020; Shumye et al., 2021). The majority of society's perception of mental illness is incompatible with scientific evidence, which could make it more difficult for people to seek and adhere to treatment (Benti et al., 2016; Jenkins et al., 2010).

There have been many reports of improving community perceptions towards mental illnesses, with the assumption that mental illness is curable, that catalyzing early treatment seeking and better treatment outcomes (Nandikove & Ng'ambwa, 2020). There is a common belief that if the community's perception of mental health were to improve, then the perception of mental illness should also improve (Girma et al., 2013). On the other hand, a negative view of mental illness influences how often people seek treatment and how stigmatized they are in various communities (Salve et al., 2013). Additionally, they frequently visit hospitals once all other avenues have been exhausted and the symptoms have been worse, which is detrimental to the prognosis for treatment (Sadik et al., 2010). There have been several reports that greater understanding of the illnesses leads to an improved common perception of individuals with mental problems (Nandikove & Ng'ambwa, 2020).

* Corresponding author.
E-mail address: genanaw21kassaye@gmail.com (G.K. Getahun).

https://doi.org/10.1016/j.actpsy.2025.104958
Received 27 October 2023; Received in revised form 24 February 2025; Accepted 26 March 2025
Available online 29 March 2025

The belief that mental illness is the result of an inherited flaw or the "work of evil conspiracies" (demons, evil spirits) is widespread in African societies (Ayano et al., 2015). Besides, patients in psychiatric facilities frequently receive blame for their illness, especially when it involves alcoholism or other drug abuse (Tesfaye et al., 2021). In Ethiopia, where preventable infectious diseases are prevalent, mental illness has received less attention because it is regarded as a non-life-threatening problem. However, mental health problems account for 12.5 % of the country's disease burden, with 12 % of the population suffering from some form of mental health problem, 2 % of whom are severe cases (Teferra, 2011; Nandikove & Ng'ambwa, 2020). In Ethiopia, there has been a long-standing misconception that severe mental illness is brought on by demon possession or the evil eye (Reta et al., 2016). As a result, the public's perception of mental illness has been impacted, and those who are affected and/or their families frequently turn to religious and traditional healers for assistance rather than medical facilities (Ayano et al., 2015).

People's perceptions of mental illnesses are influenced by a number of factors, such as marital status, income level, occupation, educational level, knowledge, encounters with those who are ill, involvement in providing care for those who are ill, having experienced mental illness, being attacked by those who are ill, friendly environmental interactions, social isolation and labeling, media portrayal, and sharing (Al-Hamzawi et al., 2015; Benedicto et al., 2016; Gebrekidan Abbay et al., 2018; Kabir et al., 2004).

Improved community perception, which is defined as a positive attitude for reducing the stigma associated with mental illnesses and harmonizing community views with scientific and medical explanations of mental health, is critically important. On the other hand, negative feelings towards those who are mentally ill are quite prevalent in Ethiopia, where the community's perception of mental illness varies by culture and other sociodemographic factors (Yeshanew et al., n.d.; Bedaso et al., 2016; Crabb et al., 2012). For the purpose of creating an effective plan for health promotion and boosting the use of mental health services by the general public and for understanding the current context, community perception assessment is essential (Indicators, 2019). Therefore, the aim of this study was to assess the perception of the community towards mental illness and associated factors in Addis Ababa, Ethiopia, in 2022.

2. Methods

2.1. Study area and population

The study was conducted in Addis Ababa, the capital of Ethiopia, which is a large country in the Horn of Africa. Addis Ababa has an estimated population of 2,738,248 based on the 2007 census and projection (Csa, 2016). The study was conducted between May 1st and 30th, 2022, among adult residents of Addis Ababa City, Ethiopia.

2.2. Study design

A community-based cross-sectional study design was carried out.

2.3. Eligibility criteria

All adults (18 years of age and older) who had resided in the selected sub-city for more than six months were included in the study, and participants who were seriously ill or unable to communicate during data collection were excluded from the study.

2.4. Sample size determination and sampling procedure

The sample size was determined using a single population proportion formula with a 95 % confidence level, a population proportion of 50 % (to obtain the maximum sample size), and a 5 % margin of error.

$$n = \frac{\left(Z\frac{\alpha}{2}\right)^2 P(1-P)}{d^2}$$

The final sample size required for this study was 634 after accounting for a 10 % non-response rate and a design effect of 1.5.

Within Addis Ababa, there were 10 sub-cities. Three of them, namely, Bole, Arada, and Lideta, were chosen at random for this study using a simple random sampling technique. These sub-cities were believed to be scientifically and logically representative of all Addis Ababa's population since they were found in different parts of Addis Ababa and have a common characteristic of all populations in the rest of the sub-cities. Then, four districts from each chosen sub-city were randomly selected by lottery method, and the households were picked using a systematic random sampling. When more than one respondent was found in a single household, a participant was selected using a lottery method. The following household participants were interviewed after three visits if the chosen house was closed during the data collection.

2.5. Study variables and definition

Community perceptions of mental illness (good/poor) were considered an outcome variable, and the independent factors were categorized as socio-demographic factors, variables related to mental illness information or thought, behavioral and social interaction-related factors, and medical factors.

Community perception towards mental illness was measured using a nine item Likert scale questionnaire, which was adopted from previous literatures (Bedaso et al., 2016; Benti et al., 2016) and finally categorized as a good or poor perception using a demarcation formula.

Positive perception of mental illness: A score above 27 on the nine items of likert scale question was considered to have a good perception of mental illness in this study (Benti et al., 2016).

Negative perception of mental Illness: A score below 27 from the nine-item Likert scale questions was considered to have poor perception towards mental illness (Benti et al., 2016).

Socioeconomic factors, such as age, marital status, sexual orientation, monthly income, occupation, and level of education.

Variables related to mental illness information or thought mental illness information source, thought about people living with mental illnesses, and thought about what causes mental illnesses.

Behavioral and social interaction-related factors: relationship with people living with mental illnesses, involvement in caring for people living with mental illnesses, having ever suffered from mental illnesses, social isolation and labeling, fear of talking with people living with mental illnesses, and loss or grief.

Medical factors: family history of mental illnesses, manifestations of mental illnesses, preferred place of treatments, sharing challenges with others, ever suffering from mental illnesses.

Peer influence is the way in which individuals are affected by the behaviors, attitudes, and opinions of their peers (Laursen & Veenstra, 2021).

Merchant: is a person who buys and sells goods or services through online or physical stores for the purpose of profit (Yoo et al., 2023).

2.6. Data collection and analysis

A questionnaire that had been modified from earlier studies (Bedaso et al., 2016; Benti et al., 2016) was used to gather the data. It was validated for Ethiopia and Sub-Saharan Africa. To categorize the outcome variable (good or poor), a demarcation threshold formula was used (Benti et al., 2016; Nandikove & Ng'ambwa, 2020). To ensure consistency, the tool was prepared in English and then translated into Amharic and back into English by experts in both languages.

Four qualified nurse professionals conducted the face-to-face

interviews and used a questionnaire with an Amharic version to collect the data. Through careful questionnaire design, training, and pretesting, the quality of the data was guaranteed. A pretest of 31 respondents was conducted in the Kolfe Keraneo sub-city prior to the actual data collection.

Data was entered into Epi Data, and SPSS version 25.0 was used for analysis. Bivariable logistic regression analysis and a multivariable logistic regression model were employed to ascertain the relationship between independent factors and outcome variables. In the end, the final model included all explanatory variables with a p-value of <0.25 and the outcome variable, and variables with a p-value of <0.05 were deemed to have a significant association with outcome variables.

2.7. Ethical statement

Ethical clearance was obtained from the research and ethics committee of Menelik II Medical and Health Science College with a protocol unique number: MIIMHSC/021/22. Permission letters were secured from the Addis Ababa Health Bureau. Written informed consent was secured from each study participant immediately before an interview.

3. Results

3.1. Socio-demographic characteristics of the study participants

A total of 626 people took part in this study providing a response rate of 98.7 %. The respondents were made up of 450 (71 %) married people and 469 (74.9 %) women. The majority of respondents (46 %) were in the 30 to 39 age range. Most (36.9 %) were followers of the Orthodox Christian faith. Of the study's participants, 156 (24.9 %) had completed elementary school, and 231 (36.9 %) were employed as housewives (Table 1).

Table 1
Socio-demographic characteristics of respondents.

Variables	Frequency	Percent (%)
Age of the respondents in years		
18–29	148	23.6
30–39	288	46.0
≥40	190	30.4
Sex of the respondents		
Male	177	25.1
Female	469	74.9
Educational status		
Can't read and write	95	15.2
Can read and write	160	25.6
Primary	156	24.9
Secondary	133	21.2
College and above	82	13.1
Marital status		
Single	140	22.4
Married	450	71.9
Divorced	36	5.8
Religion		
Protestant	169	27.0
Orthodox	231	36.9
Muslim	184	29.4
Catholic	42	6.7
Occupation		
Housewife	231	36.9
Government employee	93	14.9
Private/self-employed	208	33.2
Merchant	94	15.0
Family size		
1–2 people	189	30.2
3–5 people	295	47.1
>5 people	142	22.7
Monthly income		
<1000	105	16.8
1000–200	281	44.9
>2000	240	38.3

3.2. Respondents' perception of mental illness

Negative perception of mental illness was defined in this study as a score of <27 on nine items on Likert scale questions. As a result, 315 people (50.3 %) who were surveyed had a negative perception towards mental illnesses (Fig. 1).

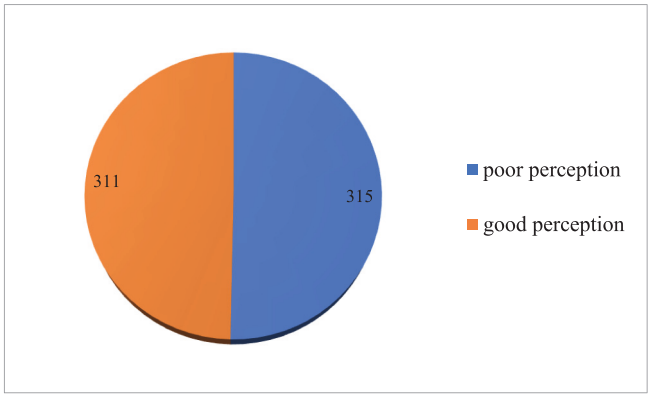


Fig. 1. Perception status of respondents for patients with mental illnesses.

3.3. Factors associated with perceptions of mental illnesses

After controlling for confounding variables, the study's results showed that factors like respondents' age, knowledge of mental illness from different sources, and occupation were significantly associated with the community's perception towards mental illness.

According to this study, respondents aged 30–39 were almost twice as likely to have a negative perception of mental illness as those aged 18–29 (AOR = 1.8, 95 % CI, 1.12–2.9). The likelihood that merchants will have a negative perception of people with mental illnesses is roughly twice that of housewives (AOR = 1.86, 95 % CI, 1.06–3.2). In comparison to those who learned about mental illness from friends, those who learned about mental illness from the media had 75 % more odds of having a positive perception towards mental illness (AOR = 0.25, 95 % CI = 0.07–0.84) (Table 2).

4. Discussion

According to the findings of this study, nearly half of the participants (49.7 %) in the study area had positive perceptions of mental illness, while more than half of the respondents had negative views. This result is consistent with research carried out in Nigeria's Kurfit Village (50.3 %) (Kabir et al., 2004), Jimma (55.2 %) (Tesfaye et al., 2021), and Iraq (50.4 %) (Al-Hamzawi et al., 2015). The results of this study, however, were lower than those of a study carried out in Western Ethiopia among inhabitants of Gimbi town (Benti et al., 2016), Hawassa (66.5 %) (Ayano et al., 2015), and Kenya (66.7 %) (Nandikove & Ng'ambwa, 2020). On the other hand, it was higher than the results of the Tanzanian study's 14.1 % (Benedicto et al., 2016). The difference in study settings could be the cause of the discrepancy. Since living in a more urban area affects perceptions of mental illness through the inference of increased stressor

Table 2
Factors associated with perception towards mental illness.

Variable	Category	Community perception		COR (95 % CI)	AOR (95 % CI)
		Good	Poor		
Age of participants	18–29	77 (52 %)	71 (48 %)	0.656 (0.426, 1.012)	1.08 (0.692, 1.68)
	30–39	155 (53.8 %)	133 (46.2 %)	0.611 (0.422, 0.884)	**1.8 (1.11, 2.97)****
	≥40	79 (41.6 %)	111 (58.4 %)	1	1
Sex	Male	74 (23.8 %)	83 (26.3 %)	1	1
	Female	237 (67.2. %)	232 (73.7 %)	1.12 (0.801, 1.562)	0.899 (0.595, 1.359)
Marital status	Single	71 (50.7 %)	69 (49.3 %)	1	1
	Married	221 (49.1 %)	229 (50.9 %)	1.06 (0.732, 1.55)	1.079 (0.697, 1.671)
	Divorced	7 (43.8 %)	9 (56.3 %)	1.33 (0.46, 3.70)	1.37 (0.427, 4.4)
Occupation	Housewife	121 (52.4 %)	110 (47.6. %)	1	1
	Government employed	51 (54.8 %)	42 (45.2 %)	0.455 (0.133, 1.55)	0.87 (0.48, 1.58)
	Private/self	96 (49 %)	100 (51 %)	0.41 (0.12, 1.46)	1.23 (0.79, 1.89)
	Merchant	39 (41.5 %)	55 (58.5 %)	0.52 (0.152, 1.78)*	**1.86 (1.06, 3.2)****
Monthly income	<1000	57 (54.3 %)	48 (45.7 %)	0.82 (0.523, 1.31)	0.86 (0.49, 1.49)
	1000–2000	135 (48 %)	146 (52 %)	1.06 (0.75, 1.5)	1.11 (0.75, 1.65)
	>2000	119 (49.6 %)	121 (50.4 %)		1
Mental health information	Yes	61 (47.7 %)	67 (52.3 %)	1.1 (0.751, 1.63)	**1**.0 (0.0001, 0.00012)
	No	250 (50.2 %)	248 (49.8 %)	1	1
Source of information	Mass media	17 (73.9 %)	6 (26.1 %)	1	1
	Religious institutions	20 (47.6 %)	22 (52.4 %)	2.85 (1.1, 7.36)	0.462 (0.141, 1.51)
	Friends	15 (39.5 %)	23 (60.5 %)	0.65 (0.335, 1.29)*	**0.25 (0.07, 0.84)****
	Health institution	13 (52 %)	12 (48 %)	0.1.092 (0.48, 2.44)	0.52 (0.136, 1.97)
Family history of mental illnesses	Yes	29 (58 %)	21 (42 %)	1.6 (0.926, 3.03)*	1.348 (0.70, 2.59)
	No	282 (49 %)	294 (51 %)	1	1
History of mental illnesses	Yes	15 (53.6 %)	13 (46.4 %)	0.849 (0.397, 1.81)	1.13 (0.48, 2.6)
	No	296 (49.5)	302 (50.5 %)	1	1

* * p-Value < 0.05, ** p-value < 0.01, 1 for reference.

factors like overcrowding, polluted environments, busy work areas, the presence of violence, and low social interaction, this study was conducted in an urban community, while the participants in other studies were from both rural and urban areas. Additionally, cultural and socioeconomic factors may play a role.

According to the results of this study, the perception of mental illness was significantly associated with factors such as age, occupation, and having information from various sources. The results of this study indicated that respondents' ages 30–39 category were negatively correlated with mental illness perception. In contrast to respondents who were between the ages of 19 and 29, those in the 30–39 age group were more likely to have a negative perception of mental illness. The results were in line with the research carried out in Agaro town, northwestern Ethiopia (Deribew & Tamirat, 2005). However, this result was at odds with research conducted in Iraq, India, and Gimbi Town, where participants between the ages of 30 and 40 were more likely to have positive perceptions of mental illness (Al-Hamzawi et al., 2015; Benti et al., 2016; Salve et al., 2013). This could be due to the fact that younger respondents may have had more access to current information from a variety of sources, but in the present study, this age group had a poor perception of mental illness. This could be because they were preoccupied with learning about sociopolitical issues, socioeconomic issues, workplace stress, and the cost of living in urban areas, among other things.

In the present study, merchants were more likely to have poor perceptions compared with housewives of mental illness. Due to their busy schedules, merchants may not receive information about mental illness from official sources like the mainstream media or the family health team. Instead, they may be exposed to a variety of information and experiences that may lead to stress and negative feelings towards mental illness, which may lead them to develop a negative perception of mental illness. On the other hand, housewives may have access to information about mental illness from the family health team or community health workers and the media (Birkie & Anbesaw, 2021). Similar to this, people who learned about mental illness from friends were less likely to have a positive attitude towards mental illnesses than people who learned about it from the media. Findings from the Gimbi town in western Ethiopia and the study conducted in the Karfi region of Nigeria (Benti et al., 2016; Kabir et al., 2004) were used to support this conclusion. This might be because information obtained from friends is less likely to be based on scientific evidence and unrecognized sources, but lower or higher study findings than this were not found in previous literature, and information obtained from friends may be more reliable and inclusive of multiple aspects than information merely obtained from friends.

4.1. *Strengths and limitations of the study*

The main strength of this study was that it had a maximum response rate and a relatively larger sample size. As a limitation, it may be subject to social desirability bias because it was gathered through a face-to-face interview, which might further affect participants to systematically overreport socially desirable perceptions and attitudes and underreport undesirable ones, leading to potentially misleading conclusions. Besides, the study was limited to a small geographic area; it cannot adequately represent the entire population of Ethiopia. Furthermore, because we used a cross-sectional study design, it was difficult to see the temporal relationship between the outcome and the independent variables.

5. Conclusion

In conclusion, the result of this study finding showed that roughly half of the residents had negative perception towards mental illness. Furthermore, the study participants' perceptions towards people with mental illnesses were significantly influenced by their age, occupation, and the information source they received from. Therefore, interventions aimed at adults, peer influencers and merchants might be more successful in reducing negative attitudes of population towards mentally ill individuals.

CRediT authorship contribution statement

Genanew Kassie Getahun: Writing – original draft, Supervision, Formal analysis, Conceptualization. **Melkamu Kebede Chefo:** Writing – review & editing, Resources, Investigation, Data curation. **Wubet Dessie Amberbir:** Writing – review & editing, Validation, Methodology, Data curation. **Teklu Assefa Engida:** Writing – review & editing,

Visualization, Software, Conceptualization.

Consent for publication

Not applicable.

Ethical statement

Ethical clearance was obtained from the research and ethics committee of Menelik II Medical and Health Science College with a protocol unique number: MIIMHSC/021/22. Permission letters were secured from the Addis Ababa Health Bureau. Written informed consent was secured from each study participant immediately before an interview.

Funding

The study has no funding source.

Declaration of competing interest

The author declares they have no competing conflicts of interest.

Data availability

The datasets used to support the findings of this study are attached to the manuscript.

References

Al-Hamzawi, A. O., Bruffaerts, R., Bromet, E. J., AlKhafaji, A. M., & Kessler, R. C. (2015, Jul 31). The epidemiology of major depressive episode in the Iraqi general population. *PLoS One, 10*(7), Article e0131937.

Ayano, G., Agidew, M., Duko, B., Mulat, H., & Alemayew, M. (2015, Dec 18). Perception, attitude and associated factors on schizophrenia and depression among residents of Hawassa City, South Ethiopia, cross sectional study. *American Journal of Psychiatry and Neuroscience., 3*(6), 116.

Bedaso, A., Yeneabat, T., Yohannis, Z., Bedasso, K., & Feyera, F. (2016, Mar 1). Community attitude and associated factors towards people with mental illness among residents of Worabe Town, Silte Zone, southern nation's nationalities and people's region, Ethiopia. *PLoS One, 11*(3), Article e0149429.

Benedicto, M., Mndeme, E., Mwakagile, D. S., & Mwansisya, T. (2016). Community knowledge, attitudes and perception towards mental illness in Dodoma Municipality, Tanzania. *ARC J Public Heal Community Med., 1*(3), 10–18.

Benti, M., Ebrahim, J., Awoke, T., Yohannis, Z., & Bedaso, A. (2016, Oct 20). Community perception towards mental illness among residents of Gimbi town, Western Ethiopia. *Psychiatry Journal*, 2016.

Birkie, M., & Anbesaw, T. (2021, Dec). Knowledge, attitude, and associated factors towards mental illness among residents of Dessie town, northeast, Ethiopia, a cross-sectional study. *BMC Psychiatry, 21*(1), 1–10.

Boti, N. (2020 Sep). Community perception and attitude towards people with schizophrenia among residents of arba minch zuria district, arba minch health and demographic surveillance sites system (AM-HDSS), Ethiopia: Cross-section study. *Risk Management and Healthcare Policy*, 1437–1446.

Choudhry, F. R., Mani, V., Ming, L. C., & Khan, T. M. (2016, Oct 31). Beliefs and perception about mental health issues: A meta-synthesis. *Neuropsychiatric Disease and Treatment*, 2807–2818.

Crabb, J., Stewart, R. C., Kokota, D., Masson, N., Chabunya, S., & Krishnadas, R. (2012). Attitudes towards mental illness in Malawi: A cross-sectional survey. *BMC Public Health, 12*(541) (ISSN 1471-2458).

Csa, I. (2016). *Central statistical agency (CSA) [Ethiopia] and ICF* (p. 1). Addis Ababa, Ethiopia and Calverton, Maryland, USA: Ethiopia Demographic and Health Survey.

Deribew, A., & Tamirat, Y. S. (2005, Oct 27). How are mental health problems perceivedby a community in Agaro town? *The Ethiopian Journal of Health Development, 19*(2), 153–159.

Gebrekidan Abbay, A., Tibebe Mulatu, A., & Azadi, H. (2018, Nov). Community knowledge, perceived beliefs and associated factors of mental distress: A case study from Northern Ethiopia. *International Journal of Environmental Research and Public Health, 15*(11), 2423.

Girma, E., Tesfaye, M., Froeschl, G., Möller-Leimkühler, A. M., Müller, N., & Dehning, S. (2013, Dec 4). Public stigma against people with mental illness in the Gilgel Gibe Field Research Center (GGFRC) in Southwest Ethiopia. *PLoS One, 8*(12), Article e82116.

Indicators, K. (2019, Jul). *Mini demographic and health survey*. EPHI and ICF.

Jenkins, R., Baingana, F., Belkin, G., et al. (2010, Mar). Mental health and the development agenda in Sub-Saharan Africa. *Psychiatric Services, 61*(3), 229–234.

Kabir, M., Iliyasu, Z., Abubakar, I. S., & Aliyu, M. H. (2004, Dec). Perception and beliefs about mental illness among adults in Karfi village, northern Nigeria. *BMC International Health and Human Rights, 4*(1), 1–5.

Laursen, B., & Veenstra, R. (2021, Dec). Toward understanding the functions of peer influence: A summary and synthesis of recent empirical research. *Journal of Research on Adolescence, 31*(4), 889–907.

Nandikove, P., & Ng'ambwa, T. O. (2020). Community perceptions on mental illness in Bungoma County, Kenya. *IOSR J Dent Med Sci., 19*, 45–52.

Pangiras, G., Ibrahim, I. M., & Latif, T. B. (2021, Dec 20). A review of the perceptions of mental illness and mental health literacy in Indonesia. *European Journal of Behavioral Sciences., 4*(2), 18–25.

Reta, Y., Tesfaye, M., Girma, E., Dehning, S., & Adorjan, K. (2016, Nov 28). Public stigma against people with mental illness in Jimma Town, Southwest Ethiopia. *PLoS One, 11*(11), Article e0163103.

Sadik, S., Bradley, M., Al-Hasoon, S., & Jenkins, R. (2010, Dec). Public perception of mental health in Iraq. *International Journal of Mental Health Systems, 4*(1), 1.

Salve, H., Goswami, K., Sagar, R., Nongkynrih, B., & Sreenivas, V. (2013, Apr). Perception and attitude towards mental illness in an urban community in South Delhi-A community based study. *Indian Journal of Psychological Medicine, 35*(2), 154–158.

Shumye, S., Amare, T., Derajew, H., Endris, M., Molla, W., & Mengistu, N. (2021, Dec). Perceived quality of life and associated factors among patients with severe mental illness in Ethiopia: A cross-sectional study. *BMC Psychology., 9*, 1–8.

Teferra Abebe S. Studies on psychotic disorders in rural Ethiopia (Doctoral dissertation, Umeå University).

Tesfaye, Y., Agenagnew, L., Anand, S., Tucho, G. T., Birhanu, Z., Ahmed, G., … Yitbarek, K. (2021, Dec). Knowledge of the community regarding mental health problems: A cross-sectional study. *BMC Psychology., 9*(1), 1–9.

Yeshanew, B., Yohannis, Z., Shumet, S., Abebaw, D., & Belete, A. (2020). *Attitude and its' associated factors towards mental illness among residents of Mertule Mariam Town*. Northern Ethiopia: Mixed method.

Yoo, K., Welden, R., Hewett, K., & Haenlein, M. (2023, Jun 1). The merchants of meta: A research agenda to understand the future of retailing in the metaverse. *Journal of Retailing, 99*(2), 173–192.