

Assessment of Common Mental Disorders among Visitors to Traditional Healers: a Mixed Study in North Ethiopia

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Research

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Abstract

Background: People with common mental disorders have instability, poor self-care, social withdrawal, poor communication with others and frequent somatic pains. Seeking help from traditional healers which offer Prayer and treatment with holy water have been strategies reported by several studies particularly in developing world.

Purpose : to assess perceived causes, associated factors and prevalence of common mental disorders among visitors to traditional healers in Mekelle town, North Ethiopia.

Methods and subjects: We used a mixed study design; a quantitative study on 380 subjects and a qualitative study among fifteen subjects. We used Self-reported questionnaire (SRQ 20) to screen common mental disorders. Also perceived causes of mental illness and psycho-social stressful situations were assessed using a semi structured tool and in-depth interview. We analyzed data using Statistical Package for Social Sciences software, windows 25. Findings in the qualitative study were triangulated with the quantitative finding.

Result: the prevalence of common mental disorders was 38.7% (95% CI; 33.7, 43.6). Factors independently associated with common mental disorders were being a woman (AOR= 1.68 (95% CI; 1.04, 2.72)), low level of education (AOR=3.2 (95% CI; 1.28, 6.91)), a conflict in the family (AOR= 3.82 (95% CI; 1.89, 7.68)) and traditional belief about the cause of mental illness (AOR= 2.33 (95% CI; 1.43, 3.79)). Experience of poor/no religious rituals, evil spirit, personal sin and will of God were the top traditional causes of common mental disorders.

Conclusion : prevalence of common mental disorders was higher among the visitors as compared to prior studies. This refers the importance of establishing a link between traditional healers and modern treatment of mental illness with special attention to women, low socio-economic class and people with poor family dynamics.

Background

Mental health as defined by the world health organization (WHO) is 'a state of well-being in which every individual realizes his or her own potential to cope with the normal stresses of life and can contribute to his or her community' [1]. Thus, WHO convinced lately as there is no health and development without mental well-being [2]. In low-income countries, mental disorders contribute 12% to the Global Burden of disease as compared to 8.1% in the developed world [3–5].

Common mental illness manifested by prominent symptoms of sadness, frustration, fearfulness and with several somatic complaints [10]. It also characterized by unpleasant subjective states such as feeling tense, worried and worthless. It can reduce the emotional resilience of individuals and put an impact on their ability to enjoy life and to cope with pain, disappointment and sadness [10–12]. People affected by mental illness are emotionally unstable, behaviorally neglecting their self-care, socially isolated, poor in

their communication, and less productive in their lives [13, 14]. In developing countries, it does not regard mental disorders as a life-threatening problem. It lacks public health attention; because of a low level of literacy [7–9].

Community based studies conducted in Ethiopia revealed that common mental disorders are highly prevalent in the society ranging from 11.7–22.7% [15–17]. And traditional measures have been the most preferred treatment option [18, 19]; because of the belief that mental illness is a related to a consequence of a sinful act [20–22].

We hypothesized that common mental health problems will be more prevalent in spiritual healing sites by holy water as compared to the general population. This study, therefore, can be helpful to address the gap in the treatment of mental health problems in low income countries. The country's current road map to integrate traditional and modern treatment as well recommends conducting studies among the traditional healers.

The aim of this study was to assess the perceived causes, prevalence and associated factors of common mental disorders among people who followed spiritual healing by holy water in Mekelle, North Ethiopia.

Methods

Study area: We conducted the study in Mekelle town, the capital of the Tigray region; found 783 Km north of Addis Ababa. The population count was 323, 700 in 2015. The town has seven sub-cities. About 91% and 7.7% of the population are Orthodox Christians and Muslims respectively [23, 24].

There are over 15 Orthodox churches in the town; almost all of them provide spiritual healing by holy water. Saint Kidane-Mihret, Abune Gebre Menfeskidus, and Saint John churches are the three famous sites. And we carried out the study in these settings.

Study design, period and population: We used a mixed study design. The study period was from December 2015 to June 2016. The study population comprised of people who visited those selected sites during the data collection period.

Eligibility Criteria: We include all people 18 years old and above. We excluded people with serious medical illness, or with acute disturbance from the study.

Sample size and sampling technique: to calculate the sample size for the quantitative study using a single population proportion formula, we considered the following; 95% confidence interval, 62% proportion [16] 5% margin of error and 10% non-response. Thus, the sample size was 398.

For the qualitative study, we used an in-depth interview on five priests who provided healing with holy water and ten holy water followers (five men and five women).

Data collection procedures: We used the self-reporting questionnaire (SRQ-20) in this study to screen to common mental disorders. The WHO developed this instrument to use to the community of low-income countries [25]. A cut-off point of 6 or more score on SRQ was used to screen common mental illness [25, 26]. In Ethiopia, the instrument is validated and it is subsequently used for epidemiological studies [25, 26].

We used other semi-structured questions to assess socio-economic characteristics and other related factors. Four Psychiatry nurses collected the data and supervised the data collection process. Three mental health specialists also made in-depth interview in selected participants. The investigators trained data collectors on the tool, confidentiality and data collection procedures. The data collectors used interviewer-administered data collection technique.

In the qualitative study, the investigators prepared an interview guide to conduct the in-depth interview. It focused on perceived causes of mental illness, and modern treatment-seeking behavior. The investigators did triangulation of the qualitative finding with the quantitative ones.

Study variables: common mental disorders was the outcome variable; whereas socio-economic, demographic, psycho-social, substance use and medical illness were independent factors.

Operational definition: a participant who scored six or more on an SRQ-20 tool meant he/she screened to have a common mental disorder [25, 26]. Also, perceived cause meant participants' belief about the cause of mental illness.

Data quality assurance: trained professionals collected the data. They did the pre-test on the sample of 5% of the total study population at another setting; and the tool was convenient. Supervisors and the principal investigators did regular supervision. Together with the data collectors, they checked the filled questionnaires daily for completeness and consistency.

Data analysis procedure: we used SPSS version 20 to code, enter, edit, clean and analyze the data. We selected variables with the p-value ≤ 0.2 in the bivariate analysis to multivariate logistic regression to control potential confounders. Variables with the p-value less than 0.05 in multivariate regression were declared to be potential predictors of CMD. For the qualitative findings, after transcribing, we arranged similar themes of the information by using thematic analysis.

Ethical consideration

We obtained ethical clearance from Mekelle University, College of Health Sciences. And we obtained permission letter from clergy of Orthodox Tewahdo Church, Mekelle zone office and from the selected settings. Each participant gave a written consent to participate in the study. Right to withdraw from the study was also respected. Data collectors assured confidentiality and privacy of each participant. Data collectors referred those participants who marked for the suicidal idea or those who screened to have common mental disorders to the nearby psychiatry clinic. The investigators and supervisors discussed with religious fathers to link severely ill patients to the nearby clinics.

Strength and limitation of the study: As strength, we used SRQ-20 which is worldwide accepted, standardized, and validated in Ethiopia [25, 26]. In addition, we incorporated both qualitative and quantitative assessments. We excluded as a limitation, seriously ill patients who were unable to communicate. This might contribute to a decreased prevalence of common mental disorders.

Result

Totally 380 people who were attending holy water took part in the quantitative study; this made the response rate 95.5%. In the qualitative study, fifteen participants (five religious leaders and ten holy water visitors) were recruited for the in-depth interview.

Socio-economic characteristics: The mean age (standard deviation) of participants was 30 (± 12.8) years with a range of 18 to 90 years. About 28.7% of the participants were young who lie in the age group of 20 to 24 years. In addition, 63.9% and 81.6% were females and urban dwellers, respectively. (Table 1)

Common Mental Disorders: About 147 participants screened positive on SRQ; thus the prevalence of screened common mental disorders was 38.7% (95% CI (33.8% - 43.2%)). The prevalence was 81%, 62.8% and 61.4% among divorced, rural and illiterate participants respectively. Among the 20 symptoms screened, the most commonly reported were a headache (57.6%), a feeling of easily tired (45.3%) and nervousness (43.2%). [Fig 1 and 2]

In the in-depth interview, however, the commonest symptoms described by holy water visitors as clinical features of mental illness were abnormal/disorganized behaviour, disorganized speech, talking and laughing alone, poor self-care practice and social withdrawal.

Bio-psycho-social Factors: About 23.7%, 38.7%, and 11.6% lived out of their family (alone or with the relatives), had poor social support and had a chronic physical illness, respectively. In addition, 5.5% were currently using alcohol (Table 2).

Perceived causes of mental illness: More than half of the participants believed on traditional beliefs as a cause of mental illness. From thus, poor or absence of religious rituals, an evil spirit and personal sin accounted 63.7%, 60.8%, and 55.3% respectively (Fig 3). From the qualitative study, two participants (priests aged 38 years and 43 years old) who provided holy water service said mental illness could be a result of a sinful act. And such sinful acts, according to the priests, are due to poor religious rituals of people.

Help seeking behaviour: all people preferred healing with holy water to mental health problems, and 77% had sought other modes of treatment besides holy water. The mean duration of follow-up was 61 days. Among those screened positive to CMD, 86.3% were following the holy water from home, and the holy water provides institutionalized service to 13.4%.

In the in-depth interview, most participants said holy water had superior efficacy to treat common mental disorders than modern treatment. And they insisted not to take modern treatment together with holy water

treatment. Because, they believed taking medication together with the holy water might show the individual's poor belief in God's power to treatment.

But, a 50 years old priest disagrees with the above statement. He said, "combining both modern treatment and a spiritual help has no problem." Because, he added "God can use different mechanisms to help people; one mechanism could be modern approaches." This priest stated, "Apostle Luke was a physician who treated people using medications, so, we can't say taking medicine is a sinful behavior."

Another priest, age 40 years, described that the help sought from spiritual areas differed from a medical help. He said, "Medical help can benefit a person who develops stress following a known stressor. A spiritual help, on the other hand, can be more beneficial for a person who involved in a sinful act and who become depressed."

Reported reasons to visit the holy water were a religious purpose, a physical illness and a mental illness for 68.7%, 19.2%, and 12.1% respectively. Among those who reported having a mental health problem, with the holy water service 19.6% stated having no progress; whereas about 34.8% and 45.6% of the participants stated good and very good progress, respectively. On the in-depth interview, all priests reported that common mental disorders had become the commonest reason to visit the holy water.

Factors Associated with Common mental disorders

Those variables with a p-value of 0.2 and less in the binary logistic regression were selected for multivariate analysis. The final analysis reveals that lower educational level showed significant association with common mental disorders as compared to tertiary and above level of education ((no formal education, (AOR=3.2, 95% CI; 1.28, 6.91)); (can read and write, AOR= 2.8(95% CI; 1.0, 7.07)).

Participants who had a serious conflict in the family in one-year period (to data collection time) were more likely to develop common mental disorders (AOR= 3.82 (95% CI; 1.89, 7.68)). Also those who believed poor/no religious rituals can cause mental illness were twice more likely to develop common mental disorders (AOR= 2.33(95% CI; 1.43, 3.79)). Women were more likely to develop common mental disorders than males (AOR= 1.68 (95% CI; 1.04, 2.72)) [Table 3].

Discussion

We studied 380 people in the quantitative and 15 people in the qualitative components. The highest number of participants is young who lie in the age group of 20 to 24 years and fifty-five percent of participants were single by marital status.

In the current study, among the 380 visitors of healing with holy water, 147 (38.7%) screened to have a common mental disorder. We found headache as the commonest symptom followed by the feeling of easily tired and nervousness.

The prevalence of CMD among people who seek help with holy water was higher as compared to the general population. The reason for this difference could be that most people with CMD in low-income countries prefer traditional healers than modern treatment [15, 16, 17 & 36]. And, as a priest (age 43 years) reported in the in-depth interview, individuals who suffered from both stressful life and the sinful act usually seek help from holy water.

The prevalence in the current study was almost similar to a prior study conducted in Borana semi-nomadic population in southern Ethiopia. According to that study, the first option to seek help for people with mental illness was healing with holy water. And people were looking for other treatment possibilities only if they got no response with holy water [18]. Nigerian and Tanzanian studies reported almost a similar prevalence with the current study. Thus, help seeking behaviour to CMD was 34.5% in prayer houses and about 48% in traditional centres in Nigeria and Tanzania respectively [29, 31].

As compared to a similar study conducted in South Africa (11% of participants consulted a religious or spiritual advisor), the prevalence in the current study was higher [30]. This could be due to the difference in the perceived causes of mental illness in a different culture; in which the proportion of participants who believed with traditional causes of mental illness was higher in the current study than the previous study [30].

However, the prevalence of CMD (38.7%) in the current study was lower than the results reported in Saudi Arabia where the dominant help-seeking included reading the Holy Quran (95.6%), using blessed water (84.7%), and blessed olive oil (60.1%) [31]. The difference could be attributed to socio-cultural differences, particularly the variance in religious rituals.

Factors independently associated with CMD were being a woman; low level of education, a conflict in the family and a belief that poor religious rituals cause mental illness. CMD were more prevalent among women than men. It can be due to different socio-cultural aspects of life for women. In low income countries, including Ethiopia, women share a higher burden of the family. This was a similar finding from prior studies in Ethiopia [15, 16].

Lower level of education was significantly associated with CMD. Mental health literacy is affected by the level of education. Thus more people with lower level of education will seek help from traditional healers, like holy water, than modern approaches. This may be directly related to higher proportion of CMD. Other studies also reported almost a similar finding [15–17].

Among holy water visitors, those who belief that 'poor/absence of religious rituals can lead to mental illness' had a higher probability of CMD than their counter parts. Since the study was conducted in a religious healing place, those who had such belief were supposed to attend the holy water. This might be the reason for the association. Prior studies also reported that CMD was significantly higher among people who seek help from traditional healers [15, 16, 17, 31].

More than half of the participants perceived traditional causes as a cause of mental illness. Lack of faith, an evil spirit, and personal sin were the three top traditional perceived causes of mental illness. Earlier studies conducted in faith healer places in Nigeria and Saudi Arabia reported that more than half of the study subjects believed on magic, evil eye and stress as the main causes of mental illness [27, 29]. Especially the belief on the devil is high; participants in the current study said, "Devil will scream and leave the patient in the healing process with the holy water!" It was also similarly found in the previous study [19].

In this study, among those who reported having a mental health problem, 80% of them stated to get improvement from the mental health problems after starting the healing with holy water. The psychological and social support people get in holy water places might play a role in the improvement of common illnesses [20].

Conclusion

This study provides insights to understand the link between traditional healing with holy water and common mental disorders. The prevalence of CMD was higher among visitors to healing with holy water. Factors independently associated with CMD were women, illiteracy, a conflict in the family, and a belief in poor religious ritual as a cause of mental illness.

To further reach mentally ill people, in low income countries, establishing a link between traditional healers and modern treatment of mental illness need to be emphasized with special attention to women, low socio economic class and people who had a conflict in the family.

Declarations

Ethics approval and consent to participate

Ethical approval was secured from college of health sciences, Mekelle University. The study areas had also given permission for the study. Everyone's consent to participate or to withdraw from the study at any time was secured before collecting the data. For participants who were screened to have common mental disorders, referral to the nearby clinic was carried out.

Consent for publication

Not applicable.

Availability of data and materials

The data supporting the findings in this article are presented with the manuscript in the section of 'additional supporting files'

Competing interests

All the authors declare that we have no any competing interests.

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Author's contributions

KT Conceived the design of this study; both KT & TBM formulated methods, data collection tools, analysis and interpretation; both authors draft the manuscript, read the manuscript and approve its submission for publication.

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Tables

Table 1: Socio demographic characteristics of people who attend traditional healing with holy water, city of Mekelle, North Ethiopia, June 2016 (n = 380)

Variable		Count	%	Common Mental Disorders		P-value
				Yes	No	
Age (in years)	<= 19	40	10.5	14	26	.271
	20-24	109	28.7	32	77	
	25-29	73	19.2	26	47	
	30-34	47	12.4	19	28	
	35-39	36	9.5	15	21	
	40-44	17	4.5	7	10	
	45-49	14	3.7	5	9	
	>= 50	44	11.6	29	15	
Residence	Urban	310	81.6	103	207	.061
	Rural	70	18.4	44	26	
Sex	Male	137	36.1	43	94	.026
	Female	243	63.9	104	139	
Religion	Orthodox	374	98.4	144	230	.49
	Muslim	6	1.6	3	3	
Ethnicity	Tigray	347	91.3	136	211	.533
	Amhara	33	8.7	11	22	
Educational status	No formal education	57	15.0	35	22	.247
	Read and Write	22	5.8	13	9	
	Primary	65	17.1	22	43	
	Secondary	114	30.0	36	78	
	Tertiary	122	32.1	41	81	
Occupation	Unemployed	63	16.6	39	24	.008
	Housewife	37	9.7	11	26	
	Daily Laborer	34	8.9	12	22	
	Gov't employee	64	16.8	13	51	
	Farmer	27	7.1	20	7	
	Merchant	32	8.4	13	19	
	Student	96	25.3	32	64	
	Pension	5	1.3	1	4	
	Others	22	5.8	6	16	
Marital status	Single	209	55.0	72	137	.05
	Married	143	37.6	58	85	
	Divorced	16	4.2	13	3	
	Widowed	12	3.2	4	8	

Table 2: The proportion of common mental disorders across different psycho-social factors, city of Mekelle, June 2016 (n=380)

Factors		Common Mental Disorders				P-value
		NO		Yes		
		Number	Percent	Number	Percent	
With Whom lives	Alone	47	72.3%	18	27.7%	.692
	Family	172	59.3%	118	40.7%	
	Relative/Friend	14	56.0%	11	44.0%	
Social or Family Support	Yes	135	57.9%	98	42.1%	.018
	No	98	66.7%	49	33.3%	
Physical Illness	Yes	22	50.0%	22	50.0%	.677
	No	211	62.8%	125	37.2%	
Mental Illness in the family	Yes	24	49.0%	25	51.0%	.221
	No	209	63.1%	122	36.9%	
Cigarette smoking	Yes	1	11.1%	8	88.9%	.104
	No	232	62.5%	139	37.5%	
Khat chewing	Yes	2	20.0%	8	80.0%	.512
	No	231	62.4%	139	37.6%	
Alcohol drinking	Yes	11	52.4%	10	47.6%	.183
	No	222	61.8%	137	38.2%	
Family or Parental death	Yes	26	47.3%	29	52.7%	.104
	No	207	63.7%	118	36.3%	
Sexual/Physical Violence	Yes	2	28.6%	5	71.4%	.239
	No	231	61.9%	142	38.1%	
Spouse Death in1yr	Yes	3	37.5%	5	62.5%	.358
	No	216	61.0%	138	39.0%	
Residential Change in1yr	Yes	25	55.6%	20	44.4%	.803
	No	207	62.0%	127	38.0%	
Serious Conflict in1yr	Yes	16	35.6%	29	64.4%	.014
	No	217	64.8%	118	35.2%	
Work Related Stress in1yr (n=354)	Yes	39	50.6%	38	49.4%	.059
	No	174	62.8%	103	37.2%	
Academic stress in 1 year (n= 357)	Yes	17	53.1%	15	46.9%	.347
	No	197	60.6%	128	39.4%	

Table 3: The degree of association between different factors and CMD among people who attend traditional healing with holy water, city of Mekelle, North Ethiopia, June 2016 (n= 380)

Variable	CMD		COR (95% CI)	AOR (95% CI)	
	Yes	No			
Educational level	No education	35	22	3.14(1.64, 6.03)	3.24 (1.28, 6.91)*
	Read & write	13	9	2.85(1.13, 7.23)	2.78 (1.0, 7.07)*
	Primary	22	43	1.01 (.54, 1.91)	.95 (.46, 1.98)
	Secondary	36	78	.91 (.53, 1.57)	.83 (.44, 1.54)
	Tertiary	41	81	1	1
Sex	Female	104	139	1.64 (1.01, 6.42)	1.68 (1.04, 2.72)*
	Male	43	94		1
Who lives with whom	Alone	18	47	.49 (.19, 1.27)	.56 (.19, 1.68)
	With family	118	172	.87 (.38, 1.99)	.91 (.34, 2.45)
	With relatives/friend	11	14	1	1
Marital status	Non married	89	148	0.88 (0.58, 1.35)	1.39 (.82, 2.35)
	Married	58	85		
Physical illness	Yes	22	22	1.69 (.89, 3.17)	1.16 (.56, 2.39)
	No	125	211		
Mental illness in the family	Yes	25	24	1.78 (.98, 3.26)	1.52 (.78, 2.98)
	No	122	209		
Death of a parent or nearer family in 1 year	Yes	29	26	1.96 (1.1, 3.48)	1.85 (.99, 3.47)
	No	118	207	1	1
Serious conflict in 1 year	Yes	29	16	3.33 (1.74, 6.39)	3.82 (1.89, 7.68)*
	No	118	217	1	1
Believe Witchcraft as a cause of mental illness	Yes	85	112	1.48 (.98, 2.25)	1.34 (.75, 2.40)
	No	62	121	1	
Believe that Mental illness can be caused by curse	Yes	86	115	1.45 (.95, 2.19)	.78 (.43, 1.42)
	No	61	118	1	1
Believe poor/no religious ritual causes mental illness	Yes	107	135	1.94 (1.24, 3.04)	2.33 (1.43, 3.79)*
	No	40	98	1	1
Believe that exposure to wind can cause mental illness	Yes	56	65	1.59 (1.02, 2.47)	1.6 (.87, 2.94)
	No	91	168	1	1
Natural catastrophe can cause mental illness	Yes	66	118	.79 (.52, 1.20)	.67 (.39, 1.17)
	No	81	115	1	1

*Significantly associated in the final analysis

Figures

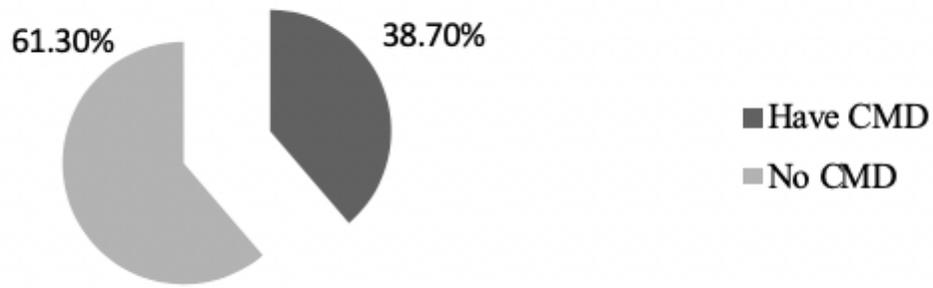


Figure 1

Prevalence of Common Mental Disorders among people who attend traditional healing with holy water, Mekelle city, North Ethiopia (n = 380)

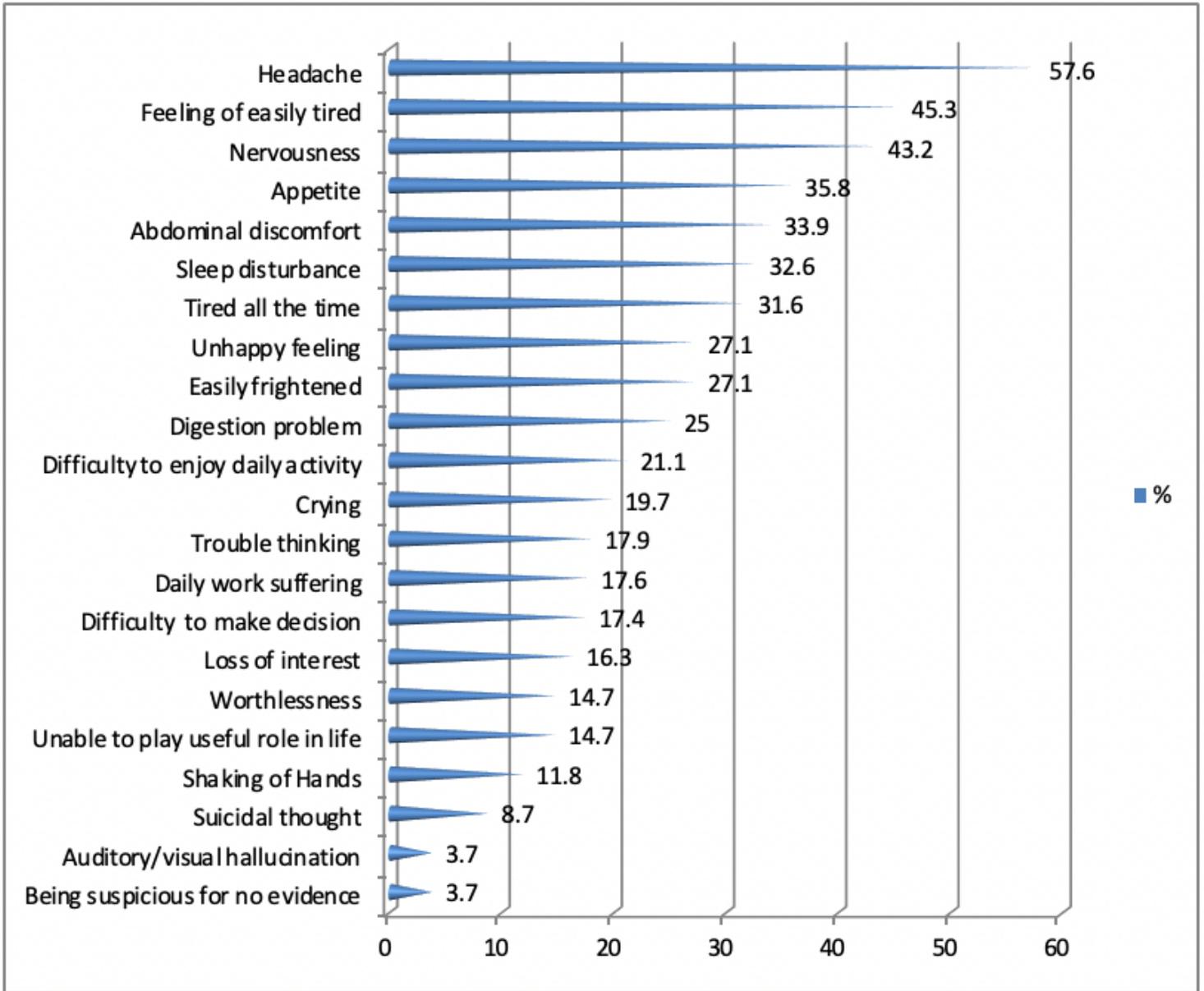


Figure 2

Distribution of people who attend traditional healing with holy water based on the reported symptoms of Common Mental Disorders, city of Mekelle, North Ethiopia, June 2016 (n = 380)

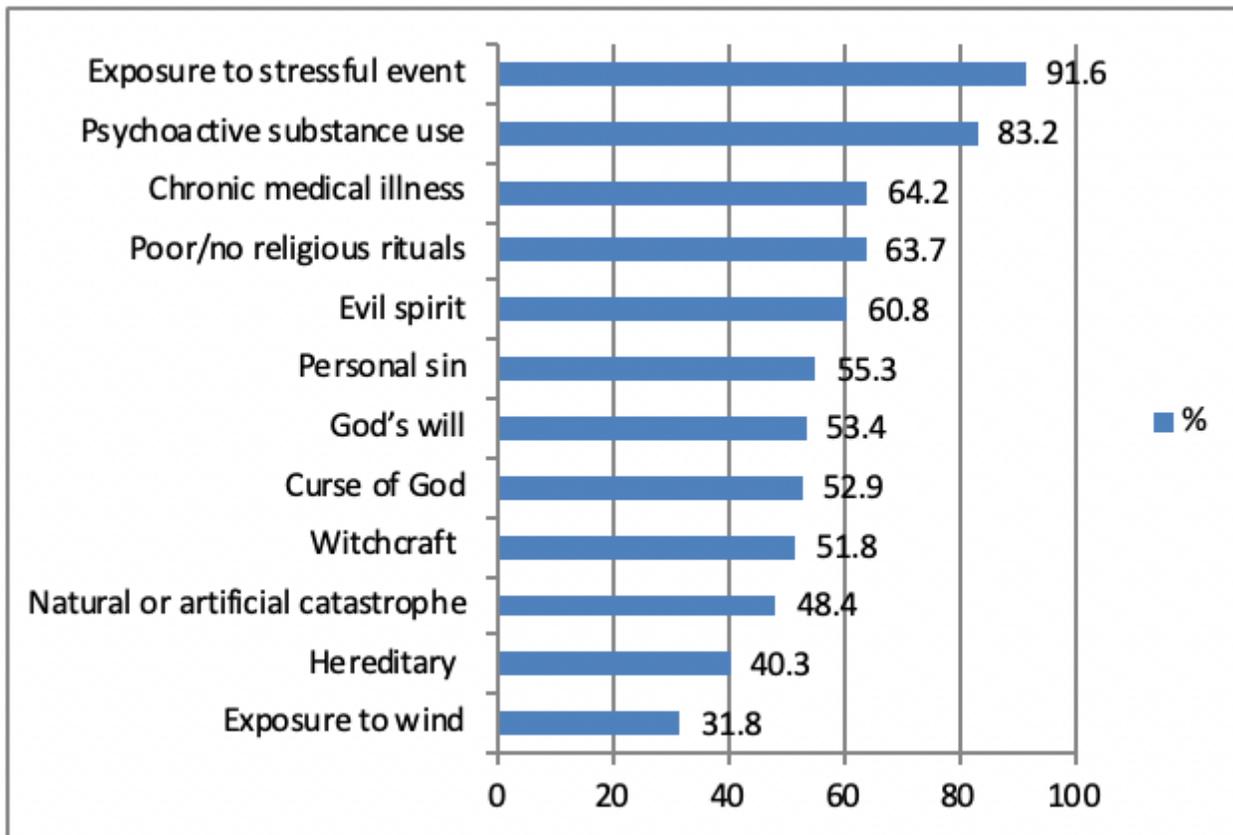


Figure 3

Percentage distribution of people who attend traditional healing with holy water based on the perceived causes of mental illness, city of Mekelle, North Ethiopia, June 2016 (n = 380)

Supplementary Files

This is a list of supplementary files associated with this preprint. Click to download.

- [Data.xlsx](#)