

Effect of Training Intervention on Mental Health Literacy Among Religious Leaders in Ogun State, Nigeria

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ABSTRACT: Globally, good mental health literacy (MHL), a multiple domain construct reflecting knowledge, perception and attitudes related to mental health, is associated with improved mental health seeking and help giving behaviours. Research has established that MHL is poor among religious leaders (RLs) who have been established to be the first point of call for mental health related needs in the society. Hence, this study assessed the effect of physical educational interventions on the domains of MHL among RLs in Ogun State, Nigeria. Quasi experimental research design was utilized for this study. Three Local Government Areas (LGAs) were selected through balloting. A sample of 85 religious leaders were purposively selected using predefined selection criteria. The interventions were implemented for six weeks. A validated structured questionnaire was used for data collection. Data on MHL domains (knowledge, perception and attitude) were collected at baseline, immediate post-intervention and at 12th week follow-up. The data were analyzed using descriptive and inferential statistics at 5% level of significance. At baseline, there was no significant difference in knowledge ($EG=9.15\pm 8.42$, $CG=13.42\pm 10.43$, $p=0.100$), perception ($EG=27.29\pm 9.12$, $CG=30.84\pm 9.80$, $p=0.221$) and attitude ($EG=16.19\pm 6.64$, $CG=18.09\pm 10.46$, $p=0.42$); At immediate post-intervention, EG scored significantly higher than CG in knowledge ($EG=25.31\pm 4.76$, $CG=13.93\pm 10.90$, $p=0.00$), perception ($EG=38.29\pm 5.48$, $CG=30.52\pm 9.94$, $p=0.00$), attitude ($EG=26.25\pm 10.06$, $CG=17.55\pm 9.54$, $p=0.00$). Similarly, at 12th week follow-up, EG scored significantly higher than CG for knowledge ($EG=23.62\pm 6.90$, $CG=10.52\pm 9.60$, $p=0.00$), perception ($EG=37.68\pm 6.66$, $CG=29.36\pm 9.25$, $p=0.00$), attitude ($EG=23.62\pm 6.90$, $CG=10.52\pm 9.60$, $p=0.00$). Physical intervention was effective in improving MHL. It was recommended among others that religious

leaders should be included as stakeholders in mental health technical working groups across the different tiers of Nigeria health system where such applies.

KEYWORDS: physical training, mental health literacy, religious leaders

INTRODUCTION

Mental health wellbeing is critical in the overall health of any individual as it helps individuals to have a good view of him/herself, good self-esteem and sound judgment to make balanced decision that will anchor other health, and development outcomes. Mental health is included in the Alma Ata definition of health by the World Health Assembly (WHA) of 1948 which defines health as a complete State of wellness in the physical, mental and social domains and not the mere absence of diseases (WHO, 1948). Mental health determines the entire socio-economic growth and development of an individual and society; however, the emphasis on health has been skewed more towards disease conditions or, and physical health related contexts. The other constructs within the definition of health have not received as much necessary attention as it is required as result of range of factors at individual through societal levels.

However, as important as mental wholeness is, mental disorders, also known as mental illness or psychiatric disorder is prevalent across the globe (Suleiman, 2016; WHO, 2016). Mental wellbeing and consequently mental disorders are determined by multiple factors which include social, psychological and biological factors; and with the consistent exposure to many adverse events from one or more of the factors above, mental disorders have been on the rise across the high and middle-low-income countries of the world including Nigeria (Suleiman, 2016; WHO, 2016).

According to the global estimates, almost one billion of the world population suffers from mental disorders; yet, under reported (Dattani et al., 2021; Global Burden of Disease, 2022; Rehm & Shield, 2019; Vigo et al., 2022). This accounts for 15% of the world population; and this further implies that about 1 out of 7 persons of the world population suffers from one or more mental disorders (Dattani et al., 2021; WHO, 2021). There are many mental disorders; however, the common ones include depressive disorders, anxiety disorders, schizophrenia, bipolar disorders and eating disorders (GBD, 2022).

Mental disorders are a range of diseases of public health importance, categorized under the non-communicable diseases (NCDs) (WHO, 2021). Mental disorders are on the rise globally and have been established as diseases of public health importance. Mental diseases could occur as single disease entity and could also exist as co-morbidity (GBD, 2022). Mental disorders have been established to be triggered or escalated by the occurrence of some chronic and or terminal diseases such as cancer, diabetes and cardiovascular diseases (Dattani et al., 2021; GBD, 2022). While the

chronic diseases are common place globally, and may last for a life time, mental health is one of the neglected areas of health concerns (Pathare et al., 2018; Wada et al., 2021; WHO, 2021). These have generated public health concerns and the WHO recommends tailored actions and plans across all regions of the world to reduce the burden of mental disorders (WHO, 2021).

Common mental disorders such as anxiety disorders accounts for 3.76%, depression accounts for 3.44% while, alcohol and drug disorders account for 2.44% of the global mental and substance use disorders (Dattani et al., 2021). Mental disorders are not localized as they affect populations in the high-, middle- and low-income regions of the world (Dattani et al., 2021; WHO, 2021). Mental disorders affect both the high and middle-low-income countries (GBD, 2022; Dattani et al., 2021). It also affects all age groups; although, overall, there are more females (13.3%) suffering from the diseases when compared to the males (12.6%) (WHO, 2021; Dattani et al., 2021). Global research also revealed that mental disorders are on the rise among children and adolescents and it is estimated at about 20% (Key, 2017). Research further reveals that 50% of mental disorders experienced by adults started before the age of 14 (WHO, 2021; Solmi et al., 2021; Kessler et al., 2005).

Despite the burden of mental diseases and its attendant implications across the globe, mental disorders are treatable, and individuals affected may lead a productive lifestyle if detected and managed early, however, many factors impede against this across the globe (Evans-Lacko et al., 2018; Pathare et al., 2018). These factors range from individual to system levels (Hongo et al., 2021). At the health system levels, the resources for mental health provision are poor (Petersen et al., 2017; Suleiman, 2016; WHO, 2021). Nigeria has only 250 Psychiatrists to serve a population of more than 200 million; and only about 2% of the health fund is allocated to mental health care management (Wada et al., 2021, WHO- AIMS, 2006). Hence, as part of the measures to address the prevention of mental disorders at the community level, the Federal Ministry of Health's policy on mental health recommends multi-sectorial collaboration of which religious leaders are identified as key players.

Religion has been proven to have effect on mental health outcomes of followers of identified religious faith (Caplan, 2019; Van Nieuw et al, 2021). The religious settings provide a window of opportunity in reaching congregation members and other community members on accurate information on mental health and its disorders. Religious institution is central in improving the mental health of individuals and preventing adverse mental health outcomes as the setting provides succor for its members, raise hope and provide support on social emotional issues, which if not well handled in life could be risk factors leading to mental disturbance (Rosmarin et al., 2021; Vitorino et al., 2018).

Mental health literacy varies among different population and findings from studies reveal that health promotion interventions could improve mental health literacy, with varying results across

its different constructs (Hankerson et al., 2021; Thorsteinsson et al., 2019). Both physical and virtual health promotion interventions have been implemented among different population to measure the effects on mental health literacy. The physical health promotion intervention includes curriculum-based training interventions in different settings, and edutainment in forms of drama. The virtual intervention includes use of website, digital applications and phone interactions. These interventions have been proven to improve mental health literacy and help seeking or giving behaviours at varying degrees among the study population.

Religious leaders are central in raising awareness on mental disorders, provision of mental health support services and referral to appropriate health care facilities (Federal Ministry of Health (FMOH), 2013; Oshodi et al., 2017). However, there is need to equip the clergymen/women with the necessary information and skills they require to understand mental health, its disorders and appropriate sources of help for management and care in order to play such roles appropriately (Filiatreau et al., 2021; Heward-Mills et al., 2018; Krstanoska-Blazeska et al., 2021). These sets of data support interventions that improve the understanding of religious leaders on mental health, its disorders, care and management.

Research has established that religious leaders are the first point of call for many persons when they experience symptoms with pointers to mental disorders in across all regions of the world (Daniel et al., 2018; Filiatreau, et al., 2021; Kpanake, 2018). However, studies conducted among these influencers revealed poor mental health literacy and referral linkages (Jang et al., 2017; Slewa-Younan et al., 2020). The qualitative study conducted among Korean American clergy revealed that the religious leaders acknowledged the need to address depression among their community members and believe they have responsibilities for the well-being of their circle of influence, however, there was a need for their capacity to be built in the identification and support on depression (Jang et al., 2017). There are variations in the knowledge of mental disorders etiology among religious leaders based on race and denominational affiliation (Payne, 2009; Yamada et al., 2019). However, most religious leaders associate the disorders to psycho-spiritual causes.

Studies reveal that religious leaders associate mental disorders with evil spirit and demonic possessions, weakness in character and bad parenting (Kpobi & Swartz, 2018; Krstanoska-Blazeska et al., 2021; Yamada et al., 2019). In the study among more than two hundred Korean and Euro-American Pastors, a greater proportion of the Korean Pastors associated mental disorders to spiritual causes, and hence recommended spiritual healing. However, this was different for the Euro-American counterpart within the same study, as the greater proportion in this category associated mental disorders to biological causes (Yamada et al., 2019). In a study conducted ten years earlier, Caucasian American Pastors better understood the biological causes of mental disorders when compared to the African American Pastors (Payne, 2009). In a similar trend in the study, the Protestants were less likely to associate mental disorders to spiritual causes when

compared to the Pentecostals and non-denominational Pastors. This finding is consistent with the results of the study among religious affiliation in the Netherlands (Noort et al., 2012; Payne, 2009). Similar to the findings among Korean and African-American Pastors, the study of Iheanacho, et al., (2016) among church-based health advisors (CHAs) in Nigeria reported that many of the CHAs believed that possession with evil spirit, experience of traumatic events and witchcraft are major causes of mental illness. In addition, less than half of the study participants believed that mental disorders are illnesses like any other illness (Iheanacho et al., 2016). The results from the studies cited indicate the need to improve the mental health literacy of religious leaders as major stakeholders in health, this has been recommended in several studies (Jang, et al., 2017; Yamada et al., 2019).

Studies have also revealed that religious leaders opt for self-prescribed spiritual treatment of mental disorders with poor referral practices to mental health professionals when consulted by persons with mental health needs (Chidarikire et al., 2018). The treatment pathways for mental disorders in the spiritual settings include prayers, deliverance, use of holy water, recitation of scriptures (Badu et al., 2019; Lambert et al., 2020). Some religious settings also use some harmful practices that include flogging, chaining and forced fasting (Badu et al., 2019; Lambert et al., 2020). These treatments are linked with the mental health belief of the religious leaders (Baheretibeb, et al., 2021). The broad objective of this study is to evaluate the effect of training intervention on mental health literacy (knowledge, perception and attitude related with mental health and disorders) among religious leaders in Ogun State, Nigeria. The specific objectives of this study were to:

1. Assess the baseline level of mental health literacy (knowledge, perception and attitude related with mental health and disorders) among religious leaders of Ogun State, Nigeria
2. Evaluate the effect of training intervention on the level of mental health literacy (knowledge, perception and attitude related with mental health and disorders) among religious leaders of Ogun State, Nigeria

RESEARCH METHOD AND MATERIALS

This study design was a quasi-experimental research design. The population for the study was religious leaders of Ogun State Nigeria. The study population was recruited from the two major religion faith in the study site which are the Christian and Islamic faith. Consenting religious leaders from these 2 faith divisions were selected by non probability method.

The sample size of the study is determined using the sample size formula for the comparison of means. Findings from the systematic review and meta-analysis of Salazar de Pablo et al. (as cited in Hassen et al. 2022) revealed effect size of $\delta=0.823$ with a standard deviation, $\sigma_2=1.55$ for comparison of effectiveness of health education interventions on mental health literacy, comparing

the intervention group with the control group. The sample size for this study assumes 95% level of confidence, and power of 80%. The calculation of the sample size is given below:

$$n = \frac{2 (Z_{\alpha} + Z_{\beta})^2 \sigma^2}{(\delta)^2} \text{ (Kadam \& Bhalerao, 2010)}$$

Where, Z_{α} : The critical value of the normal distribution at 95% level of confidence = 1.96

Z_{β} : The critical value of the normal distribution at power of 80% = 0.84

σ^2 : Standard deviation of mental health literacy score in previous intervention study = 1.55

δ – Estimated effect size of mental health literacy intervention in previous study = 0.823

$$n = \frac{2 (1.96 + 0.84)^2 1.55}{(0.823)^2}$$

$$n = \frac{24.30}{(0.6773)}$$

$$n = 35.88$$

However, attrition rate was added to the above calculation.

The recruitment criteria was used to purposively select religious leaders from the Christian and Islamic faiths. A total of 93 eligible religious leaders, 48 for experimental group and 45 for the control were recruited for the study. The instrument for data collection included quantitative data collection instrument using semi-structured questionnaire. The quantitative instrument was adapted from a vignette and scale-based measure of mental health literacy by O'Connor and Casey (2015) and Jorm et al. (2010).

Section A: The age and years of experience of the participants were assessed as an open-ended question

Section B: This was a 37-item semi-structured and vignette knowledge questions which measured knowledge of mental health, its causes, identification of common mental disorders by sign and symptoms, treatment of mental disorders and resources for help. Each correct response was assigned one point score and 0-point for every wrong answer and not sure; making up a 37-point knowledge scale. Scores of ≥ 28 was regarded as good knowledge, scores between 19 to 27 regarded as intermediate knowledge and ≤ 18 as poor knowledge.

Section C: Perception of Mental Disorders: This was a 12 item Likert based perception statements. All the perception statements were negatively worded except for the 6th and 7th statements which were positively worded. All the 12 items were scored on a scale of 1-5 with items 6 and 7 being reversed score. The score is computed as 1 = strongly agree, 2= agree, 3= undecided, 4=disagree, 5 = strongly disagree. The total score obtainable was 60. Score ranging from 45 – 60 was considered good perception, 30 - 44 was considered fair perception, while score ranging from 0-29 was considered as poor perception.

Section D: Attitudes towards Mental Disorders: This was a 10 item Likert based attitude statements. The 10 items were positively worded and would be scored on a scale of 1-5 scale where definitely unwilling = 1, probably unwilling = 2, undecided = 3, probably willing = 4 and definitely willing = 5. The maximum score obtainable was 50. Score ranges from 38-50 was considered as good attitude, 25-37 considered as fair attitude and 0-24 was considered as poor attitude.

The instruments were reviewed by experts in the field of public and mental health including psychiatrists and clinical psychologist to ensure the face validity of the instruments. Cronbach's Alpha model technique was employed to test the reliability of the questionnaire. This was done by administering the questionnaire once to 30 religious leaders similar to the study participants in Remo division of Ogun State.

Data was collected by trained research assistants (RAs). Quantitative data was collected at 3 different points of the study namely baseline, immediate post-intervention assessment at the end of the 6 weeks intervention, and the end line assessment, at the end of the 12 weeks follow-up period.

The questionnaires (pre- and post-intervention questionnaire) were serially numbered for control and recall purposes. They were checked for completeness and accuracy after collection from participants. They were sorted, edited and coded manually by the investigator with use of coding guide. The IBM SPSS software version 21 was used for data analysis. Variables were summarized using descriptive statistics including mean, median, standard deviation, ranges, frequencies, and proportions. Difference in mean of two groups was compared using the student's t-test, at P value ≤ 0.05 .

RESULTS

Knowledge domain of mental health literacy

The result at baseline showed that the mean general mental health knowledge score was 3.94 ± 3.90 for EG and 5.96 ± 5.44 for CG. Mean scores for knowledge of mental disorder was 0.71 ± 0.92 for EG and 1.22 ± 0.19 for CG. For the knowledge of treatment of mental disorders, the EG was 3.31 ± 3.18 and CG was 4.04 ± 3.26 respectively. The EG scored 1.19 ± 1.55 for mean knowledge of sources of information, while CG was 2.20 ± 1.70 .

At baseline, the comprehensive mental health knowledge score was 9.15 ± 8.42 for EG and 13.42 ± 10.43 for CG. The baseline mean score for comprehensive knowledge for the CG was slightly higher for the CG compared with EG, there was no significant difference among the three groups (Refer to Table 1).

Table 1

Comparison of measures of knowledge domain of mental health literacy across the experimental group and control group at baseline

Knowledge domain Variables	Sub-Maximum Points of Scale Measure	EG N=48		CG N=45		<i>p</i>
		$\bar{X}(SE)$	$\pm SD$	$\bar{X}(SE)$	$\pm SD$	
General knowledge	19	3.94(0.56)	3.90	5.96(0.81)	5.44	0.122
Disorder knowledge	5	0.71(0.13)	0.92	1.22(0.19)	0.19	0.034
Treatment knowledge	9	3.31(0.46)	3.18	4.04(0.49)	3.26	0.571
Information knowledge	4	1.19(0.22)	1.55	2.20(0.25)	1.70	0.014*
Comprehensive knowledge	37	9.15(1.25)	8.42	13.42(1.29)	10.43	0.100

*Significant at $p < 0.05$

Perception and Attitudinal domains of mental health literacy at baseline

At baseline, mean score for perception of mental disorder was 27.29 ± 9.12 for EG and 30.84 ± 9.80 . The result for perception was measured on a 60-point perception likert scale. The baseline result revealed poor perception of mental disorders by about two-third of the participants in EG (64.6%), while close to half of the participants in CG (48.9%) had poor perception of mental disorders.

The result for attitude was measured on a 50-point attitudinal likert scale. The attitudinal mean score was 16.19 ± 7.94 for EG and 18.09 ± 10.46 for CG. While the baseline mean attitudinal scores for the control group was slightly higher than the experimental group, there was no significance difference between the groups (Refer to Table 2).

Table 2

Comparison of measures of perception and attitude domains of mental health literacy for the study groups at baseline

Variables	Maximum Points of Scale Measure	EG N=48		CG N=45		<i>p</i>
		$\bar{X}(SE)$	$\pm SD$	$\bar{X}(SE)$	$\pm SD$	
Perception score	60	27.29(1.32)	9.12	30.84(1.46)	9.80	0.221
Attitudinal score	50	16.19(1.15)	7.94	18.09(1.56)	10.46	0.423

*Significant at $P < 0.05$

Knowledge domain of mental health literacy at immediate post-intervention

At immediate post-intervention assessment, the knowledge of the participants in the experimental group increased across the various sub-domains of knowledge. There was at least a 50.0% increment in the proportion of participants that correctly answered that many people may have a mental problem, without noticing the problem, while there was a 1-point decline for participants of CG. Similarly, there was at the least 35.0% increment in the proportion of religious leaders who correctly indicated that mental health includes normal intelligence, stable mood, harmonious relationships, and good ability to adapt to life.

The mean scores for the comprehensive knowledge of mental health for EG=25.31±4.76 while CG = 13.93±10.90. Overall, the proportion of participants that had good knowledge of mental disorders increased compared to the baseline (Refer to Figure 3).

Table 3

Comparison of measures of mental health knowledge across the experimental group and control group at immediate post intervention

Variables	Maximum Points on Scale of Measure	EG N=48		CG N=44		
		$\bar{X}(SE)$	$\pm SD$	$\bar{X}(SE)$	$\pm SD$	
General knowledge	19	14.00 (0.44)	3.06	6.20 (0.83)	5.50	0.000*
Disorder knowledge	5	1.67 (0.15)	1.05	1.16 (0.18)	1.20	0.090
Treatment knowledge	9	6.85(0.26)	1.77	4.60 (0.53)	3.51	0.000*
Information knowledge	4	2.79(0.18)	1.23	1.98 (0.25)	1.69	0.001*
Comprehensive knowledge	37	25.31(0.69)	4.76	13.93 (1.64)	10.90	0.000*

*Significant at $p < 0.05$

Perception and attitude domain of mental health literacy at immediate post-intervention

The perception of the experimental group improved at immediate post intervention. The proportion of the participants with good perception increased with a 10.4% for EG while there was no difference for CG. The mean scores for perception of mental disorders for EG=38.29±5.48 and CG=30.52 ±9.94.

The attitude of the religious leaders in the experimental group increased at immediate post-intervention. The proportion of religious leaders that were at least probably unwilling to spend an

evening socializing with someone with a mental illness decreased from 87.5% to 33.2% for EG. This was similar across other attitudinal statements. Overall, a total of 14.6% of the participants in EG had good attitudes within the mental health literacy domain as opposed to none at baseline. Mean scores for attitude was 26.25 ± 10.06 for EG and 17.55 ± 9.54 for CG. There was a significant difference in the attitudinal mean score (Refer to Table 4).

Table 4

Comparison of measures of perception and attitude domains of mental health literacy across the experimental group and control group at immediate post intervention

Variables	Maximum Points on Scale of Measure	EG N=48		CG N=44		P
		$\bar{X}(SE)$	$\pm SD$	$\bar{X}(SE)$	$\pm SD$	
Perception score	60	38.29(0.79)	5.48	30.52(1.50)	9.94	0.000*
Attitudinal score	50	26.25(1.45)	10.06	17.55(1.44)	9.54	0.000*

*Significant at $P < 0.05$

Knowledge domain of mental health literacy at 12th week post intervention

Mean scores results for general knowledge of mental health was 12.53 ± 4.57 for EG and 4.68 ± 4.67 for CG. For the knowledge sub-domain measuring knowledge of mental disorders, the experimental group similarly had higher mean scores when compared with the control group (Refer to Table 5). The trend was similar for mean scores for knowledge of treatment of mental disorders and sources of information. The experimental group had higher mean scores when compared with the control group (10.52 ± 9.60) (Refer to Table 5).

Table 5

Comparison of measures of mental health literacy across the experimental group and control group at 12 weeks follow-up period

Variables	Maximum Points on Scale of Measure	EG N=48		CG N=45		P
		$\bar{X}(SE)$	$\pm SD$	$\bar{X}(SE)$	$\pm SD$	
General knowledge	19	12.53(0.67)	4.57	4.68(0.70)	4.67	0.000*
Disorder knowledge	5	1.75(0.13)	0.92	0.82(0.16)	1.06	0.000*
Treatment knowledge	9	6.13(0.29)	1.98	3.52(0.49)	3.27	0.000*
Information knowledge	4	3.21(0.15)	1.02	1.50(0.25)	1.64	0.000*
Comprehensive knowledge	37	23.62(1.01)	6.90	10.52(1.45)	9.60	0.000*

*Significant at $P < 0.05$

Perception and attitude domains of mental health literacy at 12th week post intervention

The result for the comparison of means for the perception domain of the mental health literacy revealed that experimental group had higher scores when compared with the control group. The difference in means was statically significant. (Refer to Table 6). In similar trend for the other domains of mental health literacy, the result for the comparison of means for the attitudinal domain for the experimental group revealed improvement across the different statements on attitude when compared with the control group.

Table 6

Comparison of measures of mental health literacy across the experimental group and control group at 12 weeks follow-up period

Variables	Maximum Points on Scale of Measure	EG1 N = 48		CG N=45		<i>p</i>
		$\bar{X}(SE)$	$\pm SD$	$\bar{X}(SE)$	$\pm SD$	
Perception score	60	37.68(0.97)	6.66	29.36(1.39)	9.25	0.000*
Attitudinal score	50	25.47(1.36)	9.30	16.82(1.19)	7.90	0.000*

*Significant at $P < 0.05$

DISCUSSION

The intervention group and the control groups were comparable at baseline across all the major domains of mental health literacy. The participants do not have good mental literacy at baseline across the two study groups. The study revealed that the intervention was effective to improve the major domains of mental health literacy at both the immediate post-intervention and 12 weeks follow up evaluation when compared with the baseline findings for each group. These findings are consistent with other studies among religious leaders across knowledge (Gouniai et al., 2022), perception (Han et al., 2023), attitude (Holleman & Chaves, 2023) and help-giving (Malviya, 2023; Slewa-Younan, et al., 2020).

CONCLUSION

In conclusion, this study revealed that physical training educational intervention is effective in improving mental health literacy of religious leaders.

Recommendations

Based on the findings from the study, the following recommendations are therefore proposed:

1. The findings from the study revealed that capacity building improved the mental health literacy of religious leaders, hence a sustainable capacity building mental health literacy program through the public health departments and collaboration with registered religious body in Ogun State is recommended.
2. In addition to availability of physical training, religious leaders should be included as stakeholders in mental health technical working groups across the different tiers of Nigeria health system where such applies.

REFERENCES

- Badu, E., Mitchell, R., & O'Brien, A. P. (2019). Pathways to mental health treatment in Ghana: Challenging biomedical methods from herbal- and faith-healing perspectives. *The International journal of social psychiatry*, 65(6), 527–538. <https://doi.org/10.1177/0020764019862305>
- Baheretibeb, Y., Wondimagegn, D., & Law, S. (2021). Holy water and biomedicine: a descriptive study of active collaboration between religious traditional healers and biomedical psychiatry in Ethiopia. *BJPsych open*, 7(3), e92. <https://doi.org/10.1192/bjo.2021.56>
- Caplan S. (2019). Intersection of Cultural and Religious Beliefs About Mental Health: Latinos in the Faith-Based Setting. *Hispanic health care international: Journal of the National Association of Hispanic Nurses*, 17(1), 4–10. <https://doi.org/10.1177/1540415319828265>
- Chidarikire, S., Cross, M., Skinner, I., & Cleary, M. (2018). Treatments for people living with schizophrenia in Sub-Saharan Africa: an adapted realist review. *International nursing review*, 65(1), 78–92. <https://doi.org/10.1111/inr.12391>
- Daniel, M., Njau, B., Mtuya, C., Okelo, E., & Mushi, D. (2018). Perceptions of Mental Disorders and Help-Seeking Behaviour for Mental Health Care Within the Maasai Community of Northern Tanzania: An Exploratory Qualitative Study. *The East African Health Research Journal*, 2(2), 103–111. <https://doi.org/10.24248/EAHRJ-D-18-00004>
- Dattani, S., Ritchie, H., & Roser, M. (2021). "Mental Health". Retrieved from: <https://ourworldindata.org/mental-health> [Online Resource]
- Evans-Lacko, S., Little, K., Meltzer, H., Rose, D., Rhydderch, D., Henderson, C., & Thornicroft, G. (2010). Development and psychometric properties of the Mental Health Knowledge Schedule. *Canadian journal of psychiatry. Revue canadienne de psychiatrie*, 55(7), 440–448. <https://doi.org/10.1177/070674371005500707>
- Filiatreau, L. M., Ebasone, P. V., Dzudie, A., Ajeh, R., Pence, B., Wainberg, M., Nash, D., Yotebieng, M., Anastos, K., Pefura-Yone, E., Nsame, D., & Parcesepe, A. M. (2021). Correlates of self-reported history of mental health help-seeking: a cross-sectional study among individuals with symptoms of a mental or substance use disorder initiating care for HIV in Cameroon. *BMC psychiatry*, 21(1), 293. <https://doi.org/10.1186/s12888-021-03306-y>

- Global Burden of Disease Collaborative Network. Global Burden of Disease Study 2019 Mental Disorders Collaborators (GBD, 2022). Global, regional, and national burden of 12 mental disorders in 204 countries and territories, 1990-2019: a systematic analysis for the Global Burden of Disease Study 2019. *The lancet. Psychiatry*, S2215-0366(21)00395-3. Advance online publication. [https://doi.org/10.1016/S2215-0366\(21\)00395-3](https://doi.org/10.1016/S2215-0366(21)00395-3)
- Gouniai, J.M., Smith, K.D., & Leonte, K.G. (2022). Do clergy recognize and respond appropriately to the many themes in obsessive-compulsive disorder?: Data from a Pacific Island community. *Mental Health, Religion & Culture*, 25, 33 - 46.
- Han, S., Lee, H. S., & Kataoka, S. (2023). "It's Taboo to Talk About It": Korean American Clergy Members' Views of Mental Health. *Psychiatric services (Washington, D.C.)*, appips20220252. Advance online publication. <https://doi.org/10.1176/appi.ps.20220252>
- Hankerson, S. H., Crayton, L. S., & Duenas, S. C. (2021). Engaging African American Clergy and Community Members to Increase Access to Evidence-Based Practices for Depression. *Psychiatric services (Washington, D.C.)*, 72(8), 974–977. <https://doi.org/10.1176/appi.ps.201900412>
- Heward-Mills, N. L., Atuhaire, C., Spoons, C., Pemunta, N. V., Priebe, G., & Cumber, S. N. (2018). The role of faith leaders in influencing health behaviour: a qualitative exploration on the views of Black African Christians in Leeds, United Kingdom. *The Pan African medical journal*, 30, 199. <https://doi.org/10.11604/pamj.2018.30.199.15656>
- Holleman, A., & Chaves, M. (2023). US Religious Leaders' Views on the Etiology and Treatment of Depression. *JAMA psychiatry*, 80(3), 270–273. <https://doi.org/10.1001/jamapsychiatry.2022.4525>
- Hongo, M., Oshima, F., Nishinaka, H., Seto, M., Ohtani, T., & Shimizu, E. (2021). Reliability and Validity of the Japanese Version of the Barriers to Access to Care Evaluation Scale Version 3 for People with Mental Disorders: An Online Survey Study. *Frontiers in psychology*, 12, 760184. <https://doi.org/10.3389/fpsyg.2021.760184>
- Iheanacho, T., Nduanya, U. C., Slinkard, S., Ogidi, A. G., Patel, D., Itanyi, I. U., Naeem, F., Spiegelman, D., & Ezeanolue, E. E. (2021). Utilizing a church-based platform for mental health interventions: exploring the role of the clergy and the treatment preference of women with depression. *Global mental health (Cambridge, England)*, 8, e5. <https://doi.org/10.1017/gmh.2021.4>
- Jang, Y., Park, N. S., Yoon, H., Ko, J. E., Jung, H., & Chiriboga, D. A. (2017). Mental health literacy in religious leaders: a qualitative study of Korean American Clergy. *Health & social care in the community*, 25(2), 385–393. <https://doi.org/10.1111/hsc.12316>
- Kessler, R., Berglund, O., Demler, R., Jin R., & Walters, E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey replication. *Archives of General Psychiatry*, 62, 593–602.
- Kpanake L. (2018). Cultural concepts of the person and mental health in Africa. *Transcultural psychiatry*, 55(2), 198–218. <https://doi.org/10.1177/1363461517749435>

- Kpobi, L.N.A., Swartz, L. (2018). 'The threads in his mind have torn': conceptualization and treatment of mental disorders by neo-prophetic Christian healers in Accra, Ghana. *Int J Ment Health Syst* 12, 40 (2018). <https://doi.org/10.1186/s13033-018-0222-2>
- Krstanoska-Blazeska, K., Thomson, R., & Slewa-Younan, S. (2021). Mental Illness Stigma and Associated Factors among Arabic-Speaking Religious and Community Leaders. *International journal of environmental research and public health*, 18(15), 7991. <https://doi.org/10.3390/ijerph18157991>
- Lambert, J. E., Nantogmah, F., Dokurugu, A. Y., Alhassan, H., Azuure, S. S., Yaro, P. B., & Kørner, J. (2020). The treatment of mental illness in faith-based and traditional healing centres in Ghana: perspectives of service users and healers. *Global mental health (Cambridge, England)*, 7, e28. <https://doi.org/10.1017/gmh.2020.21>
- Malviya, S. (2023). The Need for Integration of Religion and Spirituality into the Mental Health Care of Culturally and Linguistically Diverse Populations in Australia: A Rapid Review. *J Relig Health* <https://doi.org/10.1007/s10943-023-01761-3>
- Noort, A., Braam, A. W., van Gool, A. R., Verhagen, P. J., & Beekman, A. T. (2012). De herkenning van psychische problemen met religieuze inhoud door pastores: een vignetstudie [Recognition of psychiatric disorders with a religious content by members of the clergy of different denominations in the Netherlands]. *Tijdschrift voor psychiatrie*, 54(9), 785–795.
- Oshodi Y. O., Ogbolu E. R., Nubi, O.P., Onajole A. T., Thornicroft G., Adeyemi J. D. (2017) Medico-Religious Collaboration: A Model for Mental Health Care in A Resource Poor Country. *Nigerian Journal of Medicine*: 343-352
- Pathare, S., Brazinova, A., & Levav, I. (2018). Care gap: a comprehensive measure to quantify unmet needs in mental health. *Epidemiology and psychiatric sciences*, 27(5), 463–467. <https://doi.org/10.1017/S2045796018000100>
- Payne J. S. (2009). Variations in pastors' perceptions of the etiology of depression by race and religious affiliation. *Community mental health journal*, 45(5), 355–365. <https://doi.org/10.1007/s10597-009-9210-y>
- Petersen, I., Marais, D., Abdulmalik, J., Ahuja, S., Alem, A., Chisholm, D., Egbe, C., Gureje, O., Hanlon, C., Lund, C., Shidhaye, R., Jordans, M., Kigozi, F., Mugisha, J., Upadhaya, N., & Thornicroft, G. (2017). Strengthening mental health system governance in six low- and middle-income countries in Africa and South Asia: challenges, needs and potential strategies. *Health policy and planning*, 32(5), 699–709. <https://doi.org/10.1093/heapol/czx014>
- Rehm, J., & Shield, K. D. (2019). Global Burden of Disease and the Impact of Mental and Addictive Disorders. *Current psychiatry reports*, 21(2), 10. <https://doi.org/10.1007/s11920-019-0997-0>
- Rosmarin, D. H., Pargament, K. I., & Koenig, H. G. (2021). Spirituality and mental health: challenges and opportunities. *The lancet. Psychiatry*, 8(2), 92–93. [https://doi.org/10.1016/S2215-0366\(20\)30048-1](https://doi.org/10.1016/S2215-0366(20)30048-1)

- Slewa-Younan, S., Guajardo, M., Mohammad, Y., Lim, H., Martinez, G., Saleh, R., & Sapucci, M. (2020). An evaluation of a mental health literacy course for Arabic speaking religious and community leaders in Australia: effects on posttraumatic stress disorder related knowledge, attitudes and help-seeking. *International Journal of Mental Health Systems*, 14, 69. <https://doi.org/10.1186/s13033-020-00401-7>
- Solmi, M., Radua, J., Olivola, M., Croce, E., Soardo, L., Salazar de Pablo, G., Shin, J., Kirkbride, J. B., Jones, P., Kim, J. H., Kim, J. Y., Carvalho, A. F., Seeman, M. V., Correll, C. U., & Fusar-Poli, P. (2021). Age at onset of mental disorders worldwide: large-scale meta-analysis of 192 epidemiological studies. *Molecular psychiatry*, 10.1038/s41380-021-01161-7. Advance online publication. <https://doi.org/10.1038/s41380-021-01161-7>
- Suleiman, D. E. (2016). Mental disorders in Nigeria: A highly neglected disease. *Annals of Nigerian Medicine*, 10, 47-48.
- Thorsteinsson, E. B., Bhullar, N., Williams, E., & Loi, N. M. (2019). Schizophrenia literacy: the effects of an educational intervention on populations with and without prior health education. *Journal of mental health*, 28(3), 229–237. <https://doi.org/10.1080/09638237.2018.1521923>
- Van Nieuw Amerongen-Meeuse, J. C., Schaap-Jonker, H., Anbeek, C., & Braam, A. W. (2021). Religious/spiritual care needs and treatment alliance among clinical mental health patients. *Journal of psychiatric and mental health nursing*, 28(3), 370–383. <https://doi.org/10.1111/jpm.12685>
- Wada, Y. H., Rajwani, L., Anyam, E., Karikari, E., Njikizana, M., Srour, L., Khalid, G.M. (2021). Mental health in Nigeria: A Neglected issue in Public Health, *Public Health in Practice*, Volume 2, 2021, 100166, ISSN 2666-5352, <https://doi.org/10.1016/j.puhip.2021.100166>. (<https://www.sciencedirect.com/science/article/pii/S2666535221000914>)
- World Health Organization (WHO). (2016). *Mental health: strengthening our response*. <http://www.who.int/media center/factsheets /fs220 /en/>.
- World Health Organization. (1948). *Constitution*. World Health Organization, Geneva
- Yamada, A. M., Lee, K. K., Kim, M. A., Moine, M., & Oh, H. (2019). Beliefs About Etiology and Treatment of Mental Illness Among Korean Presbyterian Pastors. *Journal of religion and health*, 58(3), 870–880. <https://doi.org/10.1007/s10943-018-0720-1>
- Vigo, D., Jones, L., Atun, R., & Thornicroft, G. (2022). The true global disease burden of mental illness: still elusive. *The lancet. Psychiatry*, 9(2), 98–100. [https://doi.org/10.1016/S2215-0366\(22\)00002-5](https://doi.org/10.1016/S2215-0366(22)00002-5)
- Vitorino, L. M., Lucchetti, G., Leão, F. C., Vallada, H., & Peres, M. (2018). The association between spirituality and religiousness and mental health. *Scientific reports*, 8(1), 17233. <https://doi.org/10.1038/s41598-018-35380-w>