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KNOWLEDGE, ATTITUDE AND PRACTICES ON MENTAL HEALTH OF OLD AGE IN THE CITY OF BACOOR, CAVITE

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Abstract: After all these years, many Filipinos still resistance on the idea of mental illness in spite of increasing cases. The negative societal connotation towards old age on mental health is prevalent. Despite growing concern regarding old age mental health in the Philippines, the type of study that evaluates mental health status has been very few. The undergraduate thesis applied a descriptive-correlational research design. The study aimed to determine the respondents' level of knowledge, attitude and practices towards mental health and examine the correlation between the three variables. The study is limited to those respondents that are Old age residing in the City of Bacoor, Cavite, ages 60-79 years old and the results of the study can be generalized to all the old age residing in the said city. The respondents were determined using stratified random sampling along with K-th systematic sampling. Using KAP Theory they measured the (1) Acquired Knowledge (2) Generating belief and attitude, and (3) practices or behavior of Old age. Data were gathered using adapted scales, Attitudes Towards Mental Health Problems Scale, Mental Health Literacy Scale and Self-Rated Abilities for Health Practices Scale. Descriptive statistics, such as mean, frequency and percentage, as well as Inferential statistics, such as Power Analysis, Pearson Product-Moment Correlation Coefficient, and Spearman correlation were utilized to describe and measure the findings of the study. Results revealed that the majority of the respondents have a high level of knowledge, had a low level of negative attitude towards mental health and have a high to very high level of practices towards mental health. The findings of this study suggest that there is a positive linear correlation between knowledge and practice. Proactiveness and initiative towards mental health literacy can maintain the high percentage of knowledge towards mental health among the elderly.

Key Words: Knowledge; attitudes towards mental health problems; practices towards mental health; old age; mental health

1. INTRODUCTION

Although the COVID-19 pandemic is coming to its end, the effect of the isolation for safety and the loss of loved ones and livelihood surged the rise of serious mental health problems and this problem is not isolated only in the younger generations but also in the old age individuals.

The population of elderly has been increasing globally with a more rapid increase in the developing

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countries (J Geriatr Ment Health, 2019). The population of old age in the Philippines is increasing as demonstrated in the census of the population year 2015 and 2020 (Philippine Statistics Authority, 2022). People aged 60 years and over reached 8.5% of its total population during year 2020. With this percentage, older people's health particularly their mental health conditions should be given more attention considering that the elderly population has promptly increased. Elderlies in the Philippines, based on customs and traditions, are seen as superior and should be respected and obeyed hence old age people have a significant influence on the next generation. Additionally, Government Officials whether in LGU or in Higher Government offices are mostly older adults thus giving light to their mental health is highly important.

According to the study conducted by Furnham and Hadjimina (2017) older age group (30-71 years old) showed poorer literacy. As Brown, Co, Lau, and Martinez (2020) Filipinos tend to hide their mental illness and seek professional help to avoid being called derogatory terms such as "crazy" and discrimination. They also emphasized the several barriers that influence Filipinos' help-seeking behavior and might contribute to Filipinos' awareness and poor mental health literacy when it comes to various mental health components such as financial constraints, self-stigma, sense of shame, fear of being labeled as 'crazy,' selfblame, resiliency, conformity to norms, and concern for the loss of face (Brown et al., 2020, as cited in Rey et al., 2022). Furthermore, old age individuals' knowledge towards mental health shows insufficient.

One of the major problems, unfortunately, is the stigma among old age towards mental health. Many elderly people view mental illness as a sign of weakness and are unlikely to admit to experiencing problems (Lima & Ivbijaro 2013). As Brown, Co, Lau, and Martinez (2020). Senior Citizens have a negative attitude towards mental health. In a study conducted by Jang et. al (2009), in the older adult sample, more negative attitudes were observed among those who believed that depression is a sign of personal weakness and that having a mentally ill family member brings shame to the whole family. Findings show that older adults are not only more subject to cultural misconceptions and stigma related to mental disorders, but also their attitudes toward service use are negatively influenced by the cultural stigma. In the study conducted Hartini, Fardana, Ariana, and Wardana (2018), the respondents ranged from 10 to 75 years of age, shows better knowledge about mental health with lower public stigma toward people with mental disorder. The resulted statistical analysis showed that knowledge about mental health significantly correlated with stigma toward mental health patients. Moreover, better knowledge of mental health corresponds to a lower rate of stigmatization. Hence, if there is inadequate knowledge towards mental health the stigmatization increases. Several Filipino old age has poor knowledge of mental health and stigmatization is relatively high due to various factors such as beliefs and cultural states (Tanaka et al., 2018).

Old age people have minimal reports about their mental health practices. Most of the studies about mental health practices are in adulthood but few studies on old age's mental health practices. There is a scarcity in the research about mental health knowledge, attitudes and mental health practices of old age. As reviewed in a research database "Pubmed" (2022), there are 10 research studies related to the stated variables however it focuses on health practitioners and organizational employees.

Practices and knowledge are directly related to each other, and as practices increase knowledge increases as well and vice versa. Old age needs to have adequate mental health knowledge to have better practices on it (Almanasef, 2020).

Despite these data, the government spending on mental health is at 0. 22% of total expenditures with a lack of mental health professionals and facilities (Martinez, Co, Lau, & Brown, 2020). In the Philippines, there are only three public mental health facilities namely Mariveles Mental Health Hospital, Cavite Center for Mental Health, and lastly National Center for Mental Health. These centers engaged in assisting every Filipino who suffers from mental illness (GMA News, 2020). Moreover, Cavite Center for Mental Health is the only accessible mental health facility near in the City of Bacoor Cavite. It is important to note that data from private mental health facilities are not included due to unavailable data. Insufficient mental health professionals and facilities along with an increasing population of old age is a major dilemma that the government should give attention to.

Mental illness is the third most common disability in the Philippines. Around 6 million Filipinos are estimated to live with depression and/or anxiety, making the Philippines the country with the

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third highest rate of mental health problems in the Western Pacific Region. However, studies are dearth when it comes to the knowledge, attitude, and practices towards mental health, particularly for those old age individuals. Studies concerning the mental wellbeing of Filipinos over the age of 60 are few and far between (Cruz et al., 2014; Carandang et al., 2020 as cited in Ballesteros & Regala, 2021).

According to Buenaventura et. al (2020) there are only a few studies about old age's knowledge, attitude and practices towards mental health. Several studies focus on the awareness of the younger ones hence, there is very little information about the mental health awareness of old age individuals. Early studies focused on adolescents and young adults thus, many researchers and studies are turning their attention to mental health awareness of the young generation. (Martinez et al. 2020). "Older people's mental health is an increasingly important area of public policy that does not get the attention it deserves" (Lee, 2007).

Furthermore, few mental health facilities are accessible in Cavite, only one public hospital can accommodate those people who are not capable to pay for private mental health hospitals due to financial constraints. Unfortunately, mostly of old age people are considered to be unemployed and they are dependent on their families (De Leon, 2014, as cited in Ballesteros & Jerwin Regala). In 2015, the senior citizen population accounted for over 7.5% of the total population equivalent to 7.5 million individuals (Philippine Statistics Authority, 2016). In addition, of the 7.5 million senior citizens in the country, only 30% receive a social pension of P500 monthly and 40% receive no pension at all (Senate of the Philippines, 2019). As the result much old age does not receive treatment compared to the younger generation due to lack of financial assistance hence, financial support plays a significant role in their overall health condition but it is greatly emphasized in their mental health status.

In accordance with the studies mentioned above, old age individuals have poor mental health knowledge along with negative attitudes and meager mental health practices therefore, it is quite necessary to know the current level of knowledge, attitude, and practices on the mental health of old age and its relationship.

The purpose of the study was to investigate the level of knowledge, attitude, and practices on the mental health of old age in the City of Bacoor, Cavite and also to bring more attention to the mental health state of the Filipino elderly, the existing state of our mental health facilities, and to awaken the government to develop a proactive mental healthcare program for Filipino old age. Moreover, the findings of the study may help each individual, particularly the elderly in overcoming misconceptions about mental health, the romanticization of mental health, and the social stigma attached to people who suffer from mental illnesses. Lastly, it serves as a rationale to develop an effective mental health program for old age people in the City of Bacoor Cavite.

2. MATERIAL AND METHODOLOGY

The study employed a descriptive correlational design and stratified random sampling with proportional allocation along with K-th systematic sampling, the following techniques were employed to obtain a sample population that best represents the entire population being studied, (Murphy, 2021). Generally, the target population of study was the entire population of old age in Bacoor City, Cavite. The respondents of the study were old age taken from this population. With regards to the minimum sample size or number of respondents needed for the study, a power analysis using Fisher inverse hyperbolic tangent transformation (Fisher Ztransformation) was applied. The Fisher Ztransformation is a way to transform the sampling distribution of Pearson's r correlation coefficient so that it becomes normally distributed. The formula to transform r to z-score denoted by C is:

$$C = \frac{1}{2} [ln(1+r) - ln(1-r)]$$

where \ln is the natural log and r is the expected correlation coefficient.

Now, the sample size determination formula is given by:

$$n = \left(\frac{Z_{\alpha} + Z_{\beta}}{C}\right)^2 + 3$$

 α is the probability of type I error (significance level)

where:

 β is the probability of type II error (1 – power of the test)

 Z_{α} is the standard normal deviate for α (If the alternative hypothesis is two-sided, $Z_{\alpha} = 2.58$ when $\alpha = 0.01$, $Z_{\alpha} = 1.96$ when $\alpha = 0.05$ and $Z_{\alpha} = 1.645$ when $\alpha = 0.10$. If the alternative hypothesis is

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one-sided $Z_{\alpha} = 1.645$ when $\alpha = 0.05$.)

 Z_{β} is the standard normal deviate for β ($Z_{\beta} = 0.84$ when $\beta = 0.20$ and $Z_{\beta} = 1.282$ when $\beta = 0.10$)

n is the total number of samples or respondents (minimum required sample size)

The study applied two-sided correlation analyses among the variables of interest. The level of significance is set to $\alpha = 0.05$ and the beta error is set to $\beta = 0.20$ (80% power) which are the commonly used values in power analysis. With reference to the collected related studies and literatures, majority of the correlations among the variables of interest of the study ranges from medium to large, thus the expected correlation coefficient is set to r = 0.30. Using Cohen's (1988) guidelines in assessing effect size this

DOMAINS	LEVELS	FREQUENCY	PERCENTAGE		
Ability to recognize disorders	Very high	14	11.57		
	High	61	50.41		
	Low	44	36.36		
	Very low	2	1.65		
Knowledge of risk factors and	Very high	28	23.14		
causes	High	61	50.41		
	Low	26	21.49		
	Verv low	6	4.96		

correlation can be described as medium. Note that higher value of correlation coefficient would mean lesser sample size, and the r-value of 0.30 was carefully chosen.

Consequently, Fisher Z-transformation and the sample size determination formula had been applied and the sample size or number of respondents needed for the study is:

$$C = \frac{1}{2} [ln(1 + 0.30) - ln(1 - 0.30)] = 0.31$$
$$n = \left(\frac{Z_{\alpha} + Z_{\beta}}{C}\right)^{2} + 3$$
$$= \left(\frac{1.96 + 0.84}{0.31}\right)^{2} + 3$$
$$= 81.58 + 3$$
$$= 85$$

The primary source of data was the data gathered from the following adapted scale of (1) Mental health Literacy Scale (MHLS) by O'Connor and Casey and (2) the Attitudes Towards Mental Health Problems Scale (ATMHP) scale by Gilbert, Bhundia, Mitra, McEwan, Irons, Sanghera and (3) Self Rated Abilities for Health Practices Scale (SRAHP) by Becker, Stuifbergen, Oh, and Hall.

It can be noted that the study intended to describe and do some statistical inferences about the knowledge, attitude and practices on mental health of the old age in the City of Bacoor, Cavite. In light of this goal, normality of the data distributions was assessed. The study underwent testing univariate normality, testing bivariate normality, data cleaning by determination and removal of multivariate outliers, and inspecting linearity in the scatterplot to assure more reliable and precise results in the main analyses. The results from these preliminary analyses helped in the determination of appropriate statistical tests to be used in the main analyses. Hence, the Pearson product moment of correlation was applied in the bivariate distribution of knowledge and practices total scores. The significance of the relationship between (a) knowledge and attitude, and (b) attitude and practices were tested using the Spearman's correlation.

3. RESULTS AND DISCUSSION

Table 1. Level of knowledge on mental health of the respondents across all the five domains

Knowledge of self- treatment	Very high	21	17.36
treatment	High	60	49.59
	Low	33	27.27
	Very low	7	5.79
Knowledge of the professional	Very high	10	8.26
help available	High	45	37.19
	Low	51	42.15
	Very low	15	12.40
Knowledge of where to seek	Very high	13	10.74
information	High	51	42.15
	Moderate	38	31.40
	Low	19	15.70
Total		121	100.00

As can be seen from the table, the majority of the respondents had high to very high level of ability to recognize disorders, knowledge of risk factors and causes, knowledge of self-treatment, and knowledge of where to seek information. The percentages can indicate that the respondents and the environment that they are in openly disseminates information regarding mental health illness derived from various sources such as their friends and families and through this information they are able to identify if a certain individual suffers from any kind of mental conditions which can also affect their knowledge on how to take care of their mental health. On the contrary, the majority of the respondents had very low to low level of knowledge of the professional help available with a combined frequency of 66 (54.45%). This can imply that there is a presence of underutilization of

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available services and that the respondents are unaware that there are such services that they can take advantage of in order to nurture their mental health and of others.

In terms of overall level of knowledge on mental health of the respondents the study concluded that the vast majority of the old age in City of Bacoor, Cavite have high level of knowledge on mental health but there were 21 (17.36%) respondents who had a low overall level of knowledge on mental health which implies that there is a concern that needed to be addressed.

As can be seen from the table, the majority of the respondents had nil to low level of negative attitude towards mental health problems, external shame, internal shame, reflected shame to the family, and nil to low level of reflected shame on self.

Table 2. Level of attitude on mental health of the respondents across all the five domains

DOMAINS	LEVELS	FREQUENCY	PERCENTAGE	
Attitudes towards mental health	Very high	2	1.65	
problems	Moderate	30	24.79	
	Low	80	66.12	
	Nil	9	7.44	
External shame	Very high	4	3.31	
	Moderate	11	9.09	
	Low	60	49.59	
	Nil	46	38.02	
Internal shame	Very high	2	1.65	
	Moderate	15	12.40	
	Low	59	48.76	
	Nil	45	37.19	
Reflected shame to the family	Very high	2	1.65	
	Moderate	19	15.70	
	Low	51	42.15	
	Nil	49	40.50	
Reflected shame on self	Very high	10	8.26	
	Moderate	16	13.22	
	Low	41	33.88	
	Nil	54	44.63	
Total		121	100.00	

In terms of overall level of negative attitude on mental health of the respondents the vast majority of old age in the city of Bacoor, Cavite have low level of negative attitude on mental health. Although there is a high percentage of low level of negative attitude, which can mean that the respondents are able to establish a positive attitude towards those with mental illness with the help of sufficient knowledge to aid in the foundation of positive attitude, the presence of high and moderate level of negative attitude towards mental health which can imply that there are other factors such as stigma and sociocultural component that can affect the attitude of an individual towards mental health.

Table 3.	Distribution	of level	of	practices	on	mental	health
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LEVELS	FREQUENCY	PERCENTAGE
Very high	52	42.98
High	56	46.28
Low	11	9.09
Very low	2	1.65
Total	121	100.00

As can be seen from the table, there were 52 (42.98%) respondents who had very high level and 56 (46.28%) respondents who had high level of practices on mental health. Meanwhile, there were 11 (9.09%) respondents who had low level, and 2 (1.65%) who had very low level of practices on mental health. From these results, it can be deduced that the vast majority of old age in the city of Bacoor, Cavite have high to very high level of practices on mental health. These results can mean that the majority of the respondents are able to perform health promoting activities and help-seeking behaviors with the help of reaching out to available information sources. However, 10.74% of respondents still have a low to very low level of practices towards mental health which can imply that there can be moderating factors that affect the formation of mental health practices such as education and unawareness of services and

Table 4. Correlation analyses summary amon	g knowledge, attitude, and	practices on mental health
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DISTRIBUTION	R	Р	REMARKS	RHO	Р	REMARKS
Knowledge and attitude	0.055	0.552	Accept H ₀	0.057	0.535	Fail to Reject H ₀
Attitude and practices	-0.015	0.869	$Accept \ H_0$	·0.025	0.782	Fail to Reject H ₀
Knowledge and practices	0.367**	0.000	Reject H ₀	0.349**	0.000	Reject H ₀

Note. R = Pearson's correlation coefficient, RHO = Spearman's correlation coefficient, P = probability value, ** highly significant

professional help available.

The computed Pearson's correlation coefficient was 0.367 with its associated probability value less than 0.001. This suggests that the study rejected the null hypothesis. It implies that there is a highly significant positive linear relationship between the knowledge and practices on mental health of the old age in the city of Bacoor, Cavite. It tells that an old age who tends to have better knowledge on mental health also tends to have better practices on mental

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health. Likewise, an old age who tends to have poorer knowledge on mental health also tends to have poorer practices on mental health. Moreover, using Cohen's (1988) guidelines in assessing effect size, the correlation coefficient of 0.367 can be described as medium. Similarly, the Spearman's correlation revealed that there is a highly significant positive monotonic relationship between the two variables (*rho= 0.349*, p = 0.001). This is expected since linear relationship is a monotonic relationship. Generally, the study concluded that there is no significant relationship between the knowledge and attitude, and between attitude and practices on mental health of the old age in the city of Bacoor, Cavite. Moreover, the study also concluded that there is a medium correlation between the knowledge and practices of the old age in the city of Bacoor, Cavite. In the previous study conducted by Chebbi, Cheour, Fekih-Romdhane and Sassi (2020) and Calha, Nobre, Luis, Oliveira, Monteiro, Ferré-Grau, and Sequeira (2022) wherein the respondents are adolescents and college students the correlation between knowledge and practices on mental health was found positive but a weak relationship from these results, it might imply as individuals increase in age their knowledge and practices on mental health also increase hence age might have directly proportional to knowledge and practices. The result might infer that the age group can moderate the intercorrelation of the variables.

4. CONCLUSIONS

The societal assumption that elderly people are not well informed about mental health, that they have a negative attitude towards people with mental illness or does not know how to practice positive mental health practices can be said to be a misconception. As this study suggests, old age individuals are well informed about mental health through various means such as television, through community programs and their peers and attitudes towards mentally ill people are also low among the elderly people in Bacoor City. This reflects that shame of having mental illness among the family, shame on self for having mental health problems and its effect on the perception of the community towards them and their family is minimal. Furthermore, results suggest that elderly people are proactive in mental health practices such as stress management, positive health related techniques and practices. This suggests that they are well informed on practices to employ for the betterment of their health.

This study also yielded a medium positive correlation between knowledge and practices which implies that through the knowledge they gain from media, peers and community programs, they are able to employ positive mental health practices.

More focus should be applied in the mental health literacy of the elderly because although there is a high knowledge on mental health, it should be maintained in order to have a healthy community. With the help of the government, psychoeducational programs should be conducted and information dissemination within the barangays about mental health clinics and available help towards those with mental health problems. Action plans should also be initiated for those individuals with low mental health literacy, furthermore, caregivers should also be proactive in gaining knowledge towards mental health, especially, if they are taking care of mentally ill relatives or family.

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6. REFERENCES

- Almanasef, M. (2021). Mental Health Literacy and Help-Seeking Behaviours Among Undergraduate Pharmacy Students in Abha, Saudi Arabia. Risk Management and Healthcare Policy, Volume14, 1281–1286. https://doi.org/10.2147/rmhp.s289211
- Ballesteros, K., & Regala, J. (2021). Growing Strong: senior citizens & their mental health in the Philippines. Retrieved November 20, 2022, from https://mentalhealthph.org/05-10/

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- Brown, J. S. L Co, M., Lau, J., & ampi. Martinez, A. B. (2020). Filipino help-seeking for mental health problems and associated barriers and facilitators: a systematic review. Social Psychiatry and Psychiatric Epidemiology, 55(11), 1397–1413. doi:10.1007/s00127-020-01937-2
- Buenaventura, R. D., Ho, J. B., & Lapid, M. I. (2020).
 COVID-19 and mental health of older adults in the Philippines: a perspective from a developing country. International Psychogeriatrics, 32(10), 1129-1133. doi: 10.1017/s1041610220000757
- Calha A, Nobre J, Luis H, Oliveira AP, Monteiro F, Ferré-Grau C, Sequeira C. Mental Health Literacy and Positive Mental Health in Adolescents: A Correlational Study. International Journal of Environmental Research and Public Health . 3(13). doi: 10.3390/ijerph19138165. PMID: 35805824; PMCID: PMC9266633.
- Chebbi, O., Sassi, H., & Cheour, M. (2020).Knowledge, attitude and behaviours toward mental illness and help-seeking in a large nonclinical Tunisian student sample. Early Intervention in Psychiatry, 15(5),1292–1305. https://doi.org/10.1111/eip.13080
- Cruz, G. T., Natividad, J. N., & amp; Saito, Y. (2019). Discussion, Conclusions, and Recommendations. Aging and Health in the Philippines, 215–226. Retrieved2022,from:https://www.eria.org/uploads /media/Books/2019-Dec-Ageing-andHealth Philippines/20-Ageing-and-Health-Philippines-Chapter-14-new.pdf
- Furnham, A., & Hadjimina, E. (2017). Influence of age and gender on mental health literacy of anxiety disorders. Psychiatry Research, 251, 8– 13. doi: 10.1016/j.psychres.2017.01.089
- GMA Integrated News. (2020, March 4). 24 Oras: Mga ordinaryong Pilipino, walang access sa mga mental health facility [Video]. Youtube. https://www.youtube.com/watch?v=4R39tawvUg
- Hartini, N., Fardana, N. A., Ariana, A. D., & Wardana, N. D. (2018). Stigma toward people with mental health problems in Indonesia. Psychology research and behavior management, 11, 535.

- Jang, Y., Chiriboga, D. A., & Okazaki, S. (2009). Attitudes toward mental health services: Age-group differences in Korean American adults. Aging &Amp; Mental Health, 13(1), 127–134. https://doi.org/10.1080/13607860802591070
- Lee, M. & amp; Inquiry Project Manager. (2007). Improving services and support for older people with mental health problems mental healthpromotion.net. Age Concern England. Retrieved from http://www.mentalhealth promotion.net/resources/improving services andsupport-for-older-people-with-mental-healthproblems.pdf
- Lima, C.A.M & Ivbijaro, G. (2013) Mental health and wellbeing of older people: opportunities and challenges. Mental Health in Family Medicine. PMID: 24427178
- Mental health policy for elderly. J Geriatr Ment Health 2019;6:4-6
- Murphy, C. B. (2021, October 13). Stratified Random Sampling: Advantagesand Disadvantages. Investopedia.https://www.investopedia.com/ask/a nswers/041615/what-are-advantages-anddisadvantages-stratified-random-sampling.asp
- Philippine Statistics Authority. (2021). 2020 Census of Population and Housing (2020 CPH)
 Population Counts Declared Official by the President. Philippine Statistics Authority.
- Philippine Statistics Authority (2016). Philippine population density (based on the 2015 census of population).https://psa.gov.ph/content/philippinepopulation-density-based-2015-census population
- Rey, A., Goño, R., Misalang, M. J., Espiritu, J., Bangayan, A. J., & amp; Dy, G. (2022). The Level of Mental Health Literacy of Filipino Adults in Metro Manila at the time of COVID-19 Pandemic. Psychology and Education: A Multidisciplinary Journal, 2(5), 378-395.
- Tanaka, C., Tuliao, M. T. R., Tanaka, E., Yamashita, T., & Matsuo, H. (2018). A qualitative study on the stigma experienced by people with mental health problems and epilepsy in the Philippines. BMC psychiatry, 18(1), 1-13.