A study on the knowledge, attitude and behavior regarding mental health of residents in a selected barangay

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Abstract

Introduction Stigmatizing attitudes are barriers to treatment of mental health disorders. The burden of stigma has not been established locally. This study aimed to assess the stigma in the community by determining the knowledge, attitudes and behaviors of barangay residents towards mental health and persons with mental health illness.

Methods A total of 422 participants were included using convenience sampling. Participants were given self-administered questionnaires that consisted of the Mental Health Knowledge Schedule (MAKS), Community Attitudes Towards the Mentally Ill (CAMI), and Reported and Intended Behavior Scale (RIBS) tools. The mean scores and percentages were computed and compared across the sociodemographic data of the respondents.

Results Knowledge levels were relatively high with a mean score of 26.63. Depression, stress, bipolar disorder and drug addiction were recognized as mental illnesses by the majority of the participants. Scores in the stigmatizing ideologies authoritarianism (3.07) and social restrictiveness (2.58) were low, while the positive ideologies benevolence (3.76) and community health ideology (3.85) had higher scores. Participants were reluctant to work with mentally-ill people (3.18) but were willing to be friends with them (3.87).

Conclusion This study concludes that the respondents were generally knowledgeable about mental health illness. There was a general acceptance and less stigmatizing attitude, and a willingness to interact with people with mental illness.

Keywords: Mental health, stigma, mental illness, behavior, psychiatry

In 2016, the global burden of mental health disorders reached around 15.5%, affecting 1.1 billion people.[1] Lifetime prevalence may reach up to 36% among those affected.[2] Over the years, the burden has increased further, equivalent to 13.0% of disability-adjusted life years (DALYs) and 21.5% years lost to disability (YLD).[3] Persons with mental disorders are 60% more likely to die prematurely from non-communicable diseases. It is estimated that around 14.6% or 8 million deaths worldwide are attributed to mental disorders.[4] Unfortunately, mentally-ill people have to face the stigma against mental health illnesses which may mark them as outcasts; as a consequence, around 70% fail to receive treatment.[5,6]

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Stigma has been conceptualized to consist of three facets: knowledge, attitudes and behavior.[7] It is one of the main barriers in providing services to persons with mental illness. Stigma marks persons with mental illness, making the community and health workers look at them with low regard.[8] Studies suggest that factors that lead to decreased health-seeking behavior by the persons with mental illness include lack of knowledge, ignorance of accessibility of treatment, prejudice, and discrimination.[5] It is also established that stigmatizing attitudes have been associated with reluctance to seek help.[6]

The prevalence of mental disorders in the Philippines is 13% , with anxiety disorder being the most common.[1] The President signed into law RA 11036, the Philippine Mental Health Law, in June 2018.[9] Although there are studies that support the effectiveness and feasibility of primary health care for the mentally-ill in the Philippines, there has been no real nationwide integration.[7,10] There are 19 community-based psychiatric inpatient units, or 1.58 beds per 100,000 population.[7] Stigma persists in the Philippines, but its burden has not been established. According to the Department of Health, the lack of programs contributes to the persistence of stigma.[11,12] This study aimed to determine the knowledge, attitude and behavior of respondents towards mental health and mental health illness.

Methods

This is a descriptive cross-sectional study using the Mental Health Knowledge Schedule (MAKS), Community Attitudes Towards the Mentally Ill (CAMI), and Reported and Intended Behavior Scale (RIBS) questionnaires to measure the level of knowledge, attitude, and behavior towards mental health and mental illness, respectively, among residents of Barangay Tibagan in San Juan City. A sample size of 422 respondents was computed using the formula to estimate a population parameter for measuring prevalence. Residents of Barangay Tibagan who were 18 to 65 years old, mentally capable, and could read and write were invited and selected by logistical convenience sampling. Those who had incompletely answered the questionnaires were excluded. Those who gave their informed consent were asked to answer the three questionnaires which were previously translated in Filipino.

Questionnaires measuring the knowledge, attitude, and behavior of the respondents were based on published research utilizing KAB as a measurement for mental health and mental illness.[5] The Mental Health Knowledge Schedule (MAKS) was designed to assess the mental health-related knowledge of a population, to determine the trend in changing levels of mental health knowledge, and to track stigma-related mental health knowledge.[13-17] The MAKS consisted of six stigma-related mental health knowledge categories: help-seeking, recognition, support, employment, treatment, and recovery; and six mental illness condition recognition categories, including depression, stress, schizophrenia, bipolar disorder, and grief. The questionnaire's reliability for the study was moderate to substantial at 0.71 (Lin's concordance statistic) while the internal consistency was moderate at 0.65 (Cronbach's alpha).

A modified version of the Community Attitudes Toward the Mentally Ill (CAMI), consisting of 26 items, was used to measure the attitude of the respondent on mental distress.[18] The questionnaire was divided into four subscales: 1) *authoritarianism* (AU), viewing a person with mental illness as someone inferior and requiring supervision; 2) *benevolence* (BE), a humanistic and sympathetic view towards persons with mental illness; 3) *social restrictiveness* (SR), the belief that persons with mental illness were a threat to society and should be avoided; and 4) *community mental health ideology* (CMHI), the acceptance of mental health services and the integration of persons with mental illness in the community. The questionnaire's reliability index for each subscale measured using Cronbach's alpha was AU = 0.68, BE = 0.76, SR = 0.80, CMHI =0.88.[18-21] CAMI was analyzed by obtaining the mean score using the Likert 5-point labeled scale: 5 strongly agree (SA); 4 agree (A); 3 neutral (N); 2 disagree (D); and 1 strongly disagree (SD).

The Reported and Intended Behavior Scale (RIBS) was used to assess the behavioral discrimination of a population towards mental illness. It is an 8-item questionnaire from the Star Social Distance Scale dividing the behavior of the population into their current and potential behavior which is depicted in four different contexts: 1) living with, 2) working with, 3) living nearby, and 4) continuing relationships with mentally-ill individuals. The questionnaire's reliability for the study was moderate to substantial, 0.75 (Lin's concordance statistic)

while the internal consistency was moderate, 0.85 (Cronbach's alpha).

The study utilized Cronbach's alpha in assessing the internal consistency in the three questionnaires. Mean scores were obtained from each questionnaire which was then compared internally and externally. For the analysis of MAKS, each item was scored using the Likert Scale to obtain the total mean score. A comparison of mean scores was performed across different prior studies.[14-17,22] The mean scores of the target population were compared to the mean scores of community samples, health care worker samples, and health care professional samples from other countries studied by other researchers. For the analysis of CAMI, the items were also scored using the Likert scale and the total mean score was analyzed based on the four subscales: *authoritarianism, benevolence, social restrictiveness, and community mental health ideology.* Each subset was analyzed by the respondent's stand as being pro- or anti-subscale where a high-score in authoritarianism and social restrictiveness denoted a profound stigma and a high score in *benevolence and community mental health ideology* indicated a minor stigma and acceptance of the mentally ill.[18,22-,24] For analysis of RIBS, the mean percentage of responses was computed for Part A while the Likert scale mean score was computed for Part B. The mean scores and percentages were computed and compared across the sociodemographic data of the respondents.

Table 1. Socio-demographic characteristics of 422 respondents.

Variable	n (%)
Sex	
Male	180 (42.6)
Female	242 (57.4)
Age (years)	
18-24	93 (22.0)
25-39	145 (34.4)
40-59	150 (35.5)
60-65	34 (8.1)
Occupation	
Unemployed	134 (31.8)
Employed	216 (51.2)
Businessman	40 (9.5)
Student	32 (7.6)
Education	
No formal education	15 (3.6)
Elementary	24 (5.7)
High School	157 (37.2)
College	186 (44.1)
Postgraduate	40 (9.5)

Results

The study consisted of 422 participants with mean age of 37.6 years; 70% were 25 to 59 years old and more than half were women. As seen in Table 1, 75% of respondents were at least a high school graduate and 60% were employed or engaged in business. The Community Attitudes Toward the Mentally Ill (CAMI) and Reported and Intended Behavior Scale (RIBS) had a Cronbach's alpha of 0.755 and 0.754, respectively. The Mental Health Knowledge Schedule (MAKS) had a Cronbach's alpha of 0.695, which is comparable to the original study of Evans-Lacko who obtained a Cronbach's alpha of 0.69-0.71.[21]

For the first part of MAKS, 80 to 90% of respondents agreed to statements on helping persons with mental health problems seek help, that treatment can be effective, that they need support and wish to be employed, and that they can recover from their illness. The mean MAKS score for this part was 26.63 out of a possible 30 points. College graduates had the highest mean score at 26.58; mean scores were noted to increase from elementary to college. There was no difference in mean scores between sexes and across age groups. As shown in Table 2, depression was recognized as a form of mental illness by 75% of respondents. More than half recognized stress, schizophrenia, bipolar disorder and drug addiction as mental health illnesses. Forty percent of respondents saw grief as a mental health problem and less than half said that it is not a mental health problem. Forty percent of respondents did not know whether schizophrenia is a mental health problem and a third did not know whether bipolar disorder is a mental health problem.

Benevolence and community mental health ideology (CMHI), the positive attitudes towards mental health illness had relatively higher mean scores (3.76 and 3.85, respectively), compared with the subscales denoting negative attitudes (authoritarianism 3.07 and social restrictiveness 2.58), as seen in Table 3. The same pattern was noted in both sexes and across age groups and levels of education. The men had higher mean scores in authoritarianism (3.13 vs 3.03) and social restrictiveness (2.65 vs 2.52); the scores for

benevolence (3.77 vs 3.75) and CMHI (3.91 vs 3.98) were similar between sexes. Starting in early adulthood (25-39 years) benevolence and CMHI scores decreased with increasing age while SR scores increased with increasing age. Benevolence and CMHI showed an increasing trend in mean scores with higher levels of education, while a decreasing trends with higher levels of education was noted for authoritarianism and SR as seen in Table 3.

The Reported and Intended Behavior Scale (RIBS) revealed that participants had a low prevalence of contact with people with mental health problems at home (20.9%), at work (16.1%), and as a neighbor (42.2%); however, more than half (56.2%) of the participants had a close friend with a mental health problem. More than half of respondents were willing to live with (53.1%) or have a neighbor (55.1%) with mental health issues. Less than half (48.1%) were willing to work with such a person and 70.9% were willing to continue the relationship with a friend who developed a mental health problem. Respondents who were 25 to 39 years old had the highest RIBS mean score (14.2). A decrease in mean scores was noted with increasing age: 13.3 for 40-59 years and 12.2 for 60-65 years. There was no difference in the mean scores between sexes and there was no discernible pattern across levels of education.

Discussion

The findings that 80 to 90% of respondents answered affirmatively to the Mental Health Knowledge Schedule (MAKS) questions and the

Table 2. Respondents' recogntion of mental illness conditions.

MAKS Part II, n (%)	Mental illness	Not a mental illness	I don't know
1. Depression	320 (75.8)	73 (17.3)	29 (6.9)
2. Stress	243 (57.6)	152 (36)	27 (6.4)
3. Schizophrenia	212 (50.2)	42 (10)	168 (39.8)
4. Bipolar disorder	247 (58.5)	51 (12.1)	124 (29.4)
5. Drug addiction	236 (55.9)	148 (35.1)	38 (9)
6. Grief	168 (39.8)	199 (47.2)	55 (13)

Table 3. Mean CAMI subscale scores and mean scores based on sex, age and educational attainment.

Variable	AU	BE	SR	CMHI
Mean subscale score	3.07	3.76	2.58	3.85
Sex				
Male	3.13	3.77	2.65	3.91
Female	3.03	3.75	2.52	3.98
Age group (years)				
18 - 24	3.05	3.79	2.43	3.92
25 - 39	3.03	3.83	2.47	4.05
40 - 59	3.12	3.71	2.72	3.90
60 - 65	3.06	3.61	2.81	3.84
Educational level				
No formal education	3.22	3.65	2.17	4.15
Elementary	3.13	3.34	3.00	3.49
High school	3.10	3.72	2.66	3.89
College	3.06	3.85	2.43	4.09
Postgraduate	2.91	3.85	2.62	3.87

AU – authoritarianism, BE – benevolence, SR – social restrictiveness, CMHI – community mental health ideology

mean score of 26.63 indicate a high level of mental health and stigama-related knowledge. The results are consistent with those of previous studies.[5-9,11,14] Previous studies found that age and educational attainment are factors affecting the MAKS score while another study noted minimal differences in MAKS scores relative to educational attainment.[10,11,25,26] The results suggest that age and educational attainment, but not sex may have an effect on MAKS scores which is consistent with other researches.[25,27]

Depression was the most commonly recognized condition as a mental health disorder. Stress, schizophrenia, bipolar disorder and drug addiction, but not grief, were also regarded as mental health conditions. The results are similar to those of other studies.[28,29] Henderson noted that stress may be perceived as a symptom rather than a condition.[5] This may explain why 152 respondents said that stress is not a mental health illness. The finding that 40% of respondents did not know whether schizophrenia is a mental disorder is similar to findings in other Asian countries where the recognition of the condition is low.[6-8] That 30% of respondents did not know that bipolar disorder is a mental health condition is lower than a sample from England.[11,22] More than a third of respondents did not consider drug addiction as a mental health condition. Abdullah postulates that these respondents believe that the persons choose to be addicted to substances rather perceive that there is a dysfunction in the mechanism of pleasure seeking and reward in the brains of those with addiction problems.[30] Less than half of respondents recognized grief as a mental health problem; they may perceive grief as a normal and temporary state.[18]

The males had a high mean score compared with the females, similar to the findings of Aznar-Lou.[31] The respondents belonging to the 40 to 59-year-age group had higher authoritarian scores compared with the other age brackets. Letovancova posits that this may be due to fear and lack of trust in persons with mental illness.[32] Evans-Lacko found that the older generation tended to have more fear and lack of trust on people with mental illness, leading to a higher stigmatization.[33] Song found a strong association between increasing age and authoritarianism.[34] The data showed an inverse relationship between an individual's educational level and authoritarianism score, similar to the findings in several other studies where lower levels of education was associated with a more negative attitude towards persons with mental illness.[20,35,36]

Social restrictiveness (SR) received the lowest mean score among the subscales, indicating that participants were unlikely to view the mentally ill as a threat to society. Women had lower scores consistent with the findings in Singaporean women.[37] Various studies had different findings regarding age and social restrictiveness, with several associating higher SR scores with increasing age and those which found no relation.[38-41] The results of this study show that SR score increased with age. Park attributed this to lesser exposure of older people to persons with mental illness and differences in outlook across generations.[41] The findings showed that SR scores decreased with an increasing level of education. These results are in contrast with those from Ethiopia, in which well-educated individuals had higher SR scores.[35,42]

The higher benevolence scores among men compared with women indicate that the males were more accepting and encouraging for people with mental illnesses. The respondents below 60 years had higher scores, with those 25 to 39 years having the highest scores. Some studies found no relationship between benevolence and educational attainment while others concluded that benevolence comes with higher educational attainment.[20,31,36] The results show increasing benevolence scores with higher levels of education.

Community mental health ideology (CMHI) had the highest mean score among the four subscales. Women had higher scores than men, similar to other sutdies.[37,43] Respondents aged 25 to 39 years had the highest mean score; the scores decreased with increasing age after 39 years.The results are similar to those of other investigators.[33,39,44,45] The findings, similar to those of Reta, revealed increasing scores with higher educational attainment.[35]

The high mean scores for benevolence and community mental health ideology (CMHI) coupled with lower scores for authoritarianism and social restrictiveness (SR) reflect the respondents' positive and less stigmatizing attitude towards persons with mental health disorders. This study concludes that the respondents were generally knowledgeable about mental health illness. There was a general acceptance and less stigmatizing attitude, and a willingness to interact with people with mental illness.

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Conflict of interest declaration

The authors certify that they have NO affiliations with or involvement in any organization or entity with any financial or non-financial interest in the subject matter or materials discussed in this manuscript. No connections, agreements, or sponsorships were made with the authors of the references used in the research.

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