

The impact of Mental Health of Older People (MHOP) Training Module for Community Health Workers: A preliminary study

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ABSTRACT

Introduction: This study aimed to determine if the mental health of older people (MHOP) training module is effective in improving knowledge among community health workers. **Materials and Methods:** One-group of pretest-posttest design was employed among 36 community health workers. The training was conducted in an elderly activity center in Malaysia. A set of questionnaires was used for data collection that consisted of two parts: a sociodemographic background and knowledge level. A statistical software (IBM SPSS Statistics version 23.0) was used for the data analysis. **Results:** The within-group analysis revealed that there was a significant mean difference between the pre-test and post-test ($p=0.00$). **Conclusion:** The MHOP training module could be an effective way to improve the knowledge level in mental health of older people among community health workers in Malaysia. The training has the potential for engaging community health workers in a delivery task related to mental health care.

Keywords: Community Health Worker, Mental Health Training, Older People

INTRODUCTION

Older people are prone to mental health problems due to several changes in their lives, such as the loss of close relatives or spouses and changes in their roles and relationships (1). Anxiety, depression, and dementia are the most common types of mental health problems in older people (2). Generally, it was reported that the prevalence rate of depression was 7% (2), dementia was 5.6%-11.7% (3) and anxiety was 3.8% (2). Such prevalence rates may underestimate the true prevalence of mental health problems in older people due to under-diagnosis as older people, assuming that mental health problems, such as dementia are a normal aging process (4). These mental health problems require further action and recognition from health care providers.

Health care providers are the frontline who majorly involved in dealing with older people. However, there is a shortage of health care

providers worldwide. It was reported that there is a shortage of 7.2 million healthcare providers (5). Specifically, the shortage in the number of gerontological nurses who are responsible for looking after older people was also significant (6,7). Due to the paucity of health care providers, it can be said that training those involved in the care of older people is highly recommended to increase their knowledge and improve the care of older people (8).

Community health workers can be the targeted group to receive training on mental health. Community health workers include those who lacked or possessed limited health background but involved in activities and care for older people (9). These groups of workers can be trained in areas related to the care of older people. Nevertheless, they lacked training in tackling the mental health needs of older people. To date, very few community health workers are trained in mental health (9). For example, Jennings et al. found that community health workers have little knowledge in the care of older people with dementia (10). Thus, it is vital to do mental health training for the community health workers to improve the quality of life in older people through proper care.

The implementation of mental health training is believed to improve the knowledge of community health care workers. Previous studies found that the mental health training program significantly

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improved the knowledge level of the community health workers in Indonesia (11), China (12), and four European countries (13). In a study involving 94 community health workers, the knowledge of mental health was significantly improved after training (14). Caulfield, Vatansever, Lambert, and Van Bortel suggested that training community health workers is an effective strategy for increasing global mental health capacity, improving knowledge, attitude, skills, and confidence, as well as clinical practice and the outcomes of older people (8). However, despite many studies reporting various training and evaluation methods, the evidence to conclude the efficacy of different training techniques is insufficient (8).

To date, a few studies have emphasized the impact of mental health training for community health workers focusing on older people. The majority of previous research focused on mental health training that is not specific to older people (9,11,15,16). Therefore, studies focusing on the impact of mental health training with specific content related to older people are scarce. Although the study by Sin, Yeo, Koh, Lee, and Ng focused on mental health training relevant for older people, the content of the training was only focused on dementia and depression (17). In Malaysia, research on mental health of older people training for community health workers is still lacking. Therefore, this study aimed at the effectiveness of mental health of older people (MHOP) training module for community health workers, as the outcome of whether the MHOP training module would improve knowledge among community health workers is unknown.

MATERIALS AND METHODS

Study design

This study employed the one-group pretest-posttest design approach.

Population

The target population was community health workers registered under the social and welfare department of Malaysia. The study sample was among registered community health workers. The inclusion criteria were: (a) Registered community health workers who were involved in the activity center for the elderly of more than sixth months and (b) Understood and can speak the Malay language. The exclusion criteria were: (a) Those with chronic mental problems such as schizophrenia (that is not well-controlled) and (b) Severe depression.

Sample size

The sample size was calculated using the sample size formula for one mean (18). The total sample size for the study with $\alpha = 5\%$ and power of 80% was calculated as 43 participants. The standard deviation (S) and difference of means (d) were selected from Marastuti et al study (11).

Recruitment of participants

This study was carried out in an elderly activity center in Peninsular Malaysia in April 2019. Figure 1 shows the process of participant recruitment. First, the researcher contacted the manager of the elderly activity center and explained the purpose of the study. The officer of the elderly activity center, then, identified suitable potential participants and provided a list of names of potential participants to the researcher. Afterwards, the researcher provided potential participants with a participant information sheet and consent form. Those who signed the consent form were selected based on the inclusion and exclusion criteria.

The total number of consented community health workers for this study was 40 participants despite the required number of participants (43 participants). From the 40 participants who consented to participate in the study, only 36 individuals attended all the sessions. Four participants did not attend all the sessions due to; work responsibility (two participants), an emergency due to the death of a family member (one participant), and not feeling well (one participant). Out of 36 participants, two were eliminated due to incomplete data on the pre- and post-test, leaving the remaining 34 participants for data analysis. Overall, the response rate was 90% at the end of the mental health training.

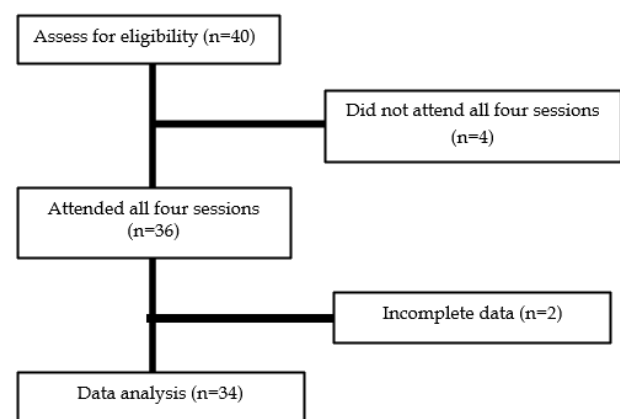


Figure 1: Recruitment procedure

Procedures

The MHOP training module was designed for community health workers and could also be extended to caregivers of older people. The module acts as a basic introduction to mental health among older people and promotes strategies that can be used for mental health awareness in older people. The World Health Organization Mental Health Gap Action Programme (WHO mhGAP) Intervention guide (19) was used to guide the development of the module. The general principles of WHO mhGAP Intervention Guide (19), such as using effective communication skills, promote respect and dignity, as well as the management steps for mental health problems, were integrated into the module.

The module was developed based on a review of previous literature related to mental health in older people, and the content was validated by two experts with a PhD in gerontology nursing to establish its validity. The validation process involved a focus group discussion between the experts where they need to complete a review form to ensure the comprehensiveness of the training module. The experts were asked to review the accuracy of the information, the feasibility of the strategies, and the acceptability of the strategies for older people. As a result, several amendments to the module were made, including the addition of more relevant topics and detailed explanations on the topic, such as identifying risks for mental health problems in older people and providing more relevant triggers related to the Malaysian population. The language of the module is revised to ensure it is written in a simple and easy-to-understand language as well as removing all medical or psychiatric jargon.

The MHOP training module consists of two units (Table 1). Unit one is focused on the information related to mental health and older people, whereas, unit two emphasized the strategies to improve mental health promotion in older people. This module was delivered using various teaching and learning strategies, including seminars and group activities. The strategy enabled the community health workers to utilize up-to-date skills and knowledge and apply these directly to their care of older people.

Session	Topic	Activities
1	Unit 1: Introduction to the MHOP training module	Ice-breaker session and filling out the pre-training evaluation forms. Review the overall content of MHOP training module.
2	Unit 1: Mental health of older people	Seminar presentation on risks for mental health problems, common mental health problems and sign and symptoms of mental health problems
3	Unit 2: Strategies to improve mental health promotion among older people (theory)	Seminar presentation on the strategies to improve mental health promotion among older people
4	Unit 2: Strategies to improve mental health promotion in older people (practical)	Group activities on how to conduct reminiscence activities, spiritual activities and positive thinking skills activities

Table 1: Outline of MHOP training module

Measures

The questionnaire consisted of a sociodemographic background and knowledge level. Sociodemographic characteristics include gender, age, current marital status, income, and presence of illness. The knowledge scale consisted of ten questions, with five Likert scales ranging from strongly agree to strongly disagree. The scale assessed knowledge of mental health problem categories, symptoms of mental health problems, and strategies to promote mental health among older people. Seven questions were positively worded, while three questions were negatively worded. The range of the score was between five to fifty.

Ethical considerations

This study obtained ethical clearance from the ethical committee of International Islamic University Malaysia and the Department of Social Welfare (DSW) of Malaysia (JKMM 100/12/5/2: 2019/275). The ethical clearance from the Department of Social Welfare (DSW) of Malaysia included the elderly activity center in which the data collection occurred. The participants received information on the research topic, the research objectives, the duration of the study, and the process of data collection.

Data analysis

Statistical software (IBM SPSS Statistics version 23.0) was used for the data analysis. The descriptive analysis produced means, standard deviations, frequency, and percentages. The test involved in the inferential analysis was paired t-test. The significance level used for all analysis was 0.05. The population effect size using Cohen's d method was calculated based on the differences between the means of pre- and post-test and the pooled variance.

RESULTS

Sociodemographic characteristics

Table 2 demonstrates the characteristics of the participants involved in the study. Most participants were female (67.6%), and the median income for the participants was RM1500. The majority of the participants (82.4%) are married. Only 11.8% of the participants reported having illnesses.

Table 2: Characteristics of participants

Characteristics	(n=34) (%)
Gender	
Male	11 (32.4)
Female	23 (67.6)
Age (years)	M: 44 (SD: 12.5)
Current marital status	
Married	28 (82.4)
Single	1 (2.9)
Divorced, Widowed, Separated	5 (14.7)
Income	Median (1500)
Presence of illness	
Yes	4 (11.8)
No	30 (88.2)

Knowledge scale on MHOP training module

There was a significant difference in the scores for knowledge test in pretest (M=34.3, SD=3.0) and knowledge test in post-test (M=38.1, SD=3.1); $t(33) = -6.07$, $p < 0.00$. The effect size (d) was calculated and found a large effect at -1.04 (20). The effect sizes (Cohen's d) for the mean differences were interpreted as 0.20 to 0.49 (small effect), 0.50 to 0.79 (medium effect) and >0.80 (large effect) (20).

Table 3 shows the comparison of pre- and post-test findings. The score on every item except the items on medications and sadness, the total mean score was significantly increased (t- values ranged from -6.80 to 2.33, p- values ranged from 0.00 to 0.03). Pre-test items, which assessed the knowledge on reminiscence (M = 4.18, SD = 0.58), knowledge on categories of mental health problems (M = 3.29, SD = 0.72) and confidence to conduct activities (M = 3.59, SD = 0.66) had improved substantially on the post-test measurement (M = 4.41, 4.15, 4.44; SD = 0.50, 0.70, 0.50). The score on three items regarding medications (M = 2.50, SD = 1.10), normal mental health (M = 2.56, SD = 0.86) and dementia (M = 2.24, SD = 0.70) remained below than 3 after the training.

DISCUSSION

The purpose of mental health training using the MHOP training module was to improve knowledge of the community health workers on mental health in older people. The improvement of knowledge scores was reported before receiving the MHOP training module and after receiving the MHOP training module. It can be said that the MHOP training module can be an effective platform to increase the knowledge of the community health workers who have no formal health or mental health education. This module has been designed to meet the demand, and the contents are also suitable for individuals with non-health background. This study contributes to the relevant body of knowledge by evaluating a mental health training module for the community health workers in Malaysia using a new MHOP training module. Only four participants out of 40 did not complete the training program despite the travel required for many participants to attend the training as well as the substantial demands of the participants' daily work and commitments.

Although this study did not achieve the targeted number of sample size, this study was sufficient to detect a large effect size. This finding indicated that mental health training has a significant impact on community health workers. One of the highest improvements of knowledge is the item related to knowledge to conduct mental health activities such as reminiscence activities. The other item that got the highest improvement before and after training was the confidence level of the participants to conduct mental health promotion activities. It can be said that the participants received adequate knowledge and confidence to conduct mental health promotion activities after training.

The finding was consistent with the previous research focusing on the training related to mental health in older people (17). However, the content of mental health training is different, as the present study involved mental health topics for older people, whereby, Sin et al. focused on older people with depression and dementia (17). To date, there were no similar studies involving the Malaysian population. The finding was congruent with the previous studies (9,14), reporting significantly improved knowledge after receiving mental health training. However, the contents of mental health training from the previous studies were focused on the general population and not focused on older people. Furthermore, the studies (9,14) involved primary health care workers, which were different from the present study that involved community health workers.

One of the limitations of this study is that this study did not employ a randomized controlled design, as this was a preliminary study. The study findings could be used for a future randomized controlled trial. The lack of a control group makes it challenging to highlight some of the changes in the participant's responses, particularly the changes between before and after mental health training. The second limitation is that this study did not assess the effectiveness of mental health training module on older people's outcomes. The third limitation is that this study did not measure a follow-up test after the training was completed. A long-term evaluation of the knowledge level is needed to determine whether the outcomes are maintained in the long-term.

*Note: Scoring ranges from 1 to 5; 1 = strongly disagree and 5 = strongly agree; Paired t-test was used, *negatively worded questions*

Items	Pre-test		Post-test		D-value		t-value	P-value
	Mean	SD	Mean	SD	Mean	SD		
I have a very good knowledge on the categories of mental health problems among older people	3.29	0.72	4.15	0.70	-0.86	0.82	-6.06	0.00
I understand that mental health problems among older people can be prevented	3.74	0.79	4.41	0.50	-0.67	0.88	-4.49	0.00
I know that medications are needed to prevent mental health problems in older people*	2.32	0.73	2.50	1.10	-0.18	1.06	-0.97	0.34
I know that mental health problems are normal for older people*	2.91	0.75	2.56	0.86	0.35	0.88	2.33	0.03
I understand dementia can be treated*	2.59	0.66	2.24	0.70	0.35	0.92	2.24	0.03
One of the symptoms of depression in older people is sadness	4.21	0.6	4.38	0.55	-0.17	0.83	-1.23	0.23
Reminiscence and spiritual activities can help to promote mental health	4.18	0.58	4.47	0.51	-0.29	0.68	-2.54	0.02
I have enough knowledge to conduct reminiscence activities	3.32	0.68	4.41	0.50	-1.09	0.93	-6.80	0.00
I am highly confident to conduct mental health promotion activities with older people	3.59	0.66	4.44	0.50	-0.85	0.78	-6.35	0.00
I understand that positive thinking is important for older people to have good mental well-being	4.15	0.66	4.50	0.51	-0.35	0.65	-3.18	0.00

Table 3: Pre- and post-training comparison (N= 34)

CONCLUSION

In conclusion, the training involving the MHOP training module improved the knowledge of the community health workers who participated in this study on mental health in older people. This finding indicated that the training has the potential for engaging community health workers in a delivery task concerning mental health care. Further studies using controlled trial research design are highly recommended to evaluate mental health training and its effectiveness on older people's outcomes.

Disclosure statement

The author declares no conflicts of interest.

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