

Employ the 5H Model, Evaluate its Efficacy, and Illustrate the Change in Elderly Depression Levels and Symptoms

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ABSTRACT

Introduction: Age-related disorders include mental health. This reduction in intergenerational cohesion and filial responsibilities has caused older people's dissatisfaction, sadness, and grief. Depression and dementia impair elderly people worldwide by taking away their independence and autonomy.

Methodology: The authors use the experimental approach to implement the 5H model, evaluate its efficacy, and show the change in depression levels and symptoms in Quang Ngai's elderly. The author chose 26 senior persons from Truong Quang Trong Ward and 23 from Tinh Thien Village to engage in the intervention study. The semi-experimental study compared N=60 samples (Experimental Group=30 and Control Group=30). The elderly control group receives conventional therapy according to the local program, whereas the experimental group receives community intervention. The GDS-15 and ICD-10 examined the intervention's efficacy.

Results: This study found that (i) mild depression had a significant change post-intervention; (ii) the mean score of depression through 2 assessments (GDS-15 scale and ICD-10 clinical assessment) both showed a significant reduction; (iii) females tended to change more than males; (iv) elderly aged 60-70 were easier to change than those over 80 years old; and (v) community-based psychosocial therapy had a significant impact on depression.

Conclusion: Considering the aforementioned favourable results, the Quang Ngai city depression prevention intervention program for the elderly is practical and can reduce symptoms, severity, and reverse depression. Hence, the model is applicable across Quang Ngai City.

Keywords: Community-based intervention; elderly; depression; GDS-15; ICD-10

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INTRODUCTION

Mental health is fundamental to the well-being and productive functioning of individuals. Mental health can be used favourably to describe a state of psychological well-being, adversely to describe its polar opposite, or euphemistically to be imposed on persons with mental health problems.¹ Mental health is not only the absence of mental disorders, but also includes the ability to think, learn, and understand one's feelings and the reactions of others. Mental health is a state of balance, both within the body and with the environment. Physical, psychological, social, cultural, spiritual and other related factors are all involved in creating this balance. There is an inseparable connection between mental and physical health. Therefore, the care, protection and rehabilitation of mental health can be considered as a vital concern of individuals, communities and societies around the world, especially in the elderly.

The term "elderly" has traditionally been defined as someone who is 65 years old or older, with those 65 to 75 years old being referred to as "early elderly" and those above 75 years old being referred to as "late elderly". For the African aging study, the World Health Organization (WHO) set 55 as the onset of old age. At the same time, WHO also acknowledged that the developing world often defines old age, not by years, but by new roles, loss of previous roles or inability to contribute actively to society.² Dong, Milholland and Vijg³ acclaimed in his article on *Nature* that the maximum human lifespan is an average age of 115, with an absolute upper limit of 125 years old. Currently, there is no unified standard for countries, but the United Nations (UN) accepted the threshold to define the elderly population as 60 years old or older, which is divided into 3 groups: young-old group (60-69 years old), middle-old group (70-79 years old), oldest-old group (80 years old and older).^{4,5}

In modern cultures, however, the social underpinnings for filial piety and other traditional values have been severely eroded as a result of the rapid rise of industrialization and the breakdown of the family structure in recent decades. Mental health merits particular consideration among the different illnesses that affect the aged. This decline in intergenerational cohesion and maintenance of filial responsibilities has led to the older person's dissatisfaction, unhappiness, and grief.⁶ Elderly individuals all over the world are disabled by depression and dementia because these disorders cause a loss of independence and, almost inevitably, a loss of autonomy.⁷ 20% of the elderly population suffers from mental problems, with dementia and depression being particularly common.⁸ Older adults frequently lose loved ones throughout their lives, which increases their risk for psychological disorders.⁹ Depression is linked to a number of detrimental effects and issues. Depression can harm the health of anyone, even the elderly, by creating a deterioration in health habits, such as a propensity for drinking, smoking, bad food, a sedentary lifestyle,

sleep disorders, and poor medication adherence.¹⁰ Depression is a medical condition marked by persistent sorrow, despondency, and loss of self-esteem. Depression among the elderly is frequently underestimated. This is due to the fact that older persons are less likely than young people to report their suicidal thoughts and depressed mood.¹¹ Elderly people frequently experience depression, which frequently goes undetected.^{12,13} Only one-third of patients with geriatric depression recover from it, and it is linked to many different things, including bad life events, medical illnesses that are persistent, hereditary variables, personality features, sleep disorders, and socioeconomic position.^{14,15} An increase in senior mortality and disability can result from depression. Among the most significant signs of depression include depressed mood, loss of interest in all activities, decreased energy, guilt-related sentiments, low self-worth, sleep problems, hunger problems, and difficulty concentrating. Around 10 million older people in Brazil experience depression.¹⁶ According to various research, the prevalence of depression in Iran has been reported to range greatly, from as low as 22% to as high as 93.3%. Some of these studies also claim that more than half of the elderly in Iran experience depression.^{17,18} Thus, it is considered that the incidence of major depression or depressed symptoms among aged Chinese are comparable to those of non-Chinese, notwithstanding disparities in stated prevalence rates.⁶

Prior to this point, there has been a paucity of research on the elderly in Vietnam, specifically depression among the old. In order to fill this void, this study evaluates the performance of the elderly's depression levels after intervention; the research findings will serve as a solid scientific basis for proposing coping strategies to help the elderly in Quang Ngai City reduce their depression levels and enhance their quality of life.

METHODOLOGY

Participant and Procedure: In this study, the authors employ the experimental method in order to apply the 5H model, evaluate the model's efficacy, and demonstrate the change in the levels and manifestations of depression among the elderly in the city of Quang Ngai from April in 2019 to October in 2021. Impact experiments based on 5H - are 5 key activities towards mental health care for the elderly in order to prevent depression: (1) Self-awareness activities: Helping the elderly to recognize themselves, their position, own role in family and social relationships; (2) Value-affirming activities: Helping the elderly improve their personal values and affirm their usefulness through community-based labor activities and age-appropriate creative activities; (3) Collective activities: Help the elderly expand their communication circle, be attached to a social group and have more life goals; (4) Activities of taking care of physical and mental health: Helping the elderly to be examined and

consciously take care of their physical and mental health regularly to prevent depression; (5) Screening activities and treatment interventions: The elderly are assessed and screened for the risk of depression; at the same time receive intervention (consultation, therapy, medication, etc.) to reduce the risk of disease.

From these 5 activities, it is divided into 3 stages:

Stage 1. *For the elderly with moderate and severe severity, they are examined at the Psychiatric Hospital of Quang Ngai province. At this stage, the procedure is as follows:* 1) Collaborators in communes/wards contact the local elderly to send invitations to visit the hospital; 2) The local cooperation group helps bring the elderly to the hospital and supports medical examination records; 3) The doctors at the Psychiatric Hospital who organize the examination for the elderly are invited to determine the disease situation and give a treatment plan, record the disease information in the medical record. 4) Doctor of Psychiatric Hospital of Quang Ngai province has made conclusions through the examination.

Stage 2. *At the health station or the People's Committee of the commune/ward organize mental health care counseling and community activities:* 1) Organize community activities by local collaborators combined with the support of experts of the research group: self-awareness activities, self-worth affirmation activities through creative activities, exchange activities. 2) Organizing psychological counseling activities to take care of physical and mental health by psychologists or social workers of the Service Team based on the difficulties and symptoms of depression of the elderly, organizing practice do group therapies, behavioral activation therapy, and Dohsa-hou to enhance positive emotions and change behavior.

Stage 3. *At home, the elderly conduct visitation activities and there are special cases that need to be examined at home.* At this stage, there are participation of local collaborators combined with the support of the research team's experts to visit the elderly's home at the first stage of the chain of activities impacting depression prevention for the elderly.

Implementation steps are implemented from the step of contacting the elderly to determine the time of arrival; organize home visits and conduct consulting chats and connections. The visitation information is recorded as data for the next impact activities of the experimental program.

Base on the purpose of the intervention purpose, the author selected a target group of 49 elderly people who met the criteria to participate in the intervention study, including: 26 elderly people in Truong Quang Trong Ward and 23 elderly people in Tinh Thien Village. Similarly, the number of samples utilized for comparison in the semi-experimental study was N=60 elderly individuals; of these, 30 out of 49 elderly individuals in Truong Quang Trong Ward and Tinh Thien Village were assigned to the experimental group. Thirty elderly people from the Nghia Dung commune

and the Le Hong Phong ward were involved in the control group. Which the control group was the elderly group that was recommended to receive conventional treatment according to the local program. This implies that elderly individuals adhere to the prescribed medication approach for depression as directed by their psychiatrist or clinician. In contrast, the experimental group experienced the effects of the community intervention strategy.

Instruments

Geriatric Depression Scale (GDS)

The most popular depression rating scale in the elderly is the GDS-shortform scale (Geriatric Depression Scale-shortform). The GDS scale was developed with the aim to identify depressive symptoms in elderly patients.^{19,20} At first, the GDS consisted of 100 items, but later it was reduced to 30 items, corresponding to 30 points and became the original GDS-30 scale indicating the presence of depression in the elderly. This scale is designed to be a self-rating scale, although it is also used in an observational manner. An advantage of this test is the "True/Incorrect" question format, which is convenient to use for the elderly population. This scale has high validity for patients who are elderly patients with inpatient TC and normal elderly people living in the community without a history of depression or mental disorders. A threshold of 11 on this original 30-point GDS scale has 85% sensitivity and 95% specificity, and a threshold of 14 is less sensitive (80%), but has a specificity of up to 100%.^{19,20} This shows that a score of 0-10 is the normal score range, and 11-30 is the depressive pathology score limit. However, the GDS-30 scale did not evaluate the difference between the autonomic symptoms in the elderly with depression and the elderly without depression.

The GDS truncation scale consisting of 15 items (GDS-15) has also been developed.²¹ It had the highest correlation for TC symptoms among the 30 items on the original GDS scale and took on average 5-7 minutes to complete this abridged scale assessment. Both the original and abridged GDS have a high correlation coefficient ($r = 0.84$, $p < 0.001$). The abbreviated GDS scale has validity in the group of elderly outpatients with emotional disorders ($n = 116$; mean age 75,7), with a threshold score of 5-6, the abbreviated GDS scale has a sensitivity of 85 % and specificity 74%.²² In a study comparing the original scale and the reduced scale in the same group of psychiatric inpatients, the reduced scale showed a high correlation coefficient ($r = 0.84$). The authors determined that the reduced scale (GDS-15) could adequately replace the original GDS-30 scale.²³ However, a definitive diagnosis of depressive disorder in older people, in addition to the use of the GDS-15 screening tool, requires diagnostic evaluation by mental health professionals.²⁴ The shorter versions of the GDS have been adapted from the original 30-item scale (GDS-30) by 15, 10, 8, and 4 items (GDS-15, GDS-10, GDS-8, and GDS-4).

These versions are developed for the convenience of the elderly with cognitive impairment. A meta-analysis of 69 studies on the validity of the GDS scale compared with gold standard measures (semi-structured interviews such as the DSM and ICD found a sensitivity of 81.9% and specificity of 77), 8% for GDS-30 and 84.3% sensitivity and 73.8% specificity for GDS-15.²⁵The accuracy of GDS-10 has been reported to be complete only. In health facilities, with a sensitivity of 85% to 88% and a specificity of 68% to 75%.²⁶ According to a study by Sarkar, Kattimani, Roy, Premarajan and Sarkar ²⁷, the GDS-15 rating scale was implemented. on 242 older people (age 60 and older) in a village in South India All participants were also assessed for depression by a clinical interview by a psychiatrist. the clinical depression rate was 6.2%; the optimal cutoff for GDS in this sample was found on 7/8 with a sensitivity and specificity of 80% and 47.6%, respectively.²⁷ A study by Baumgartner, Jahn, Friedrich, Alexandrowicz and Wancata²⁸ in Germany showed that the GDS-15 scale has a sensitivity of 71.8% and a specificity of 82.8%. 15 were used for Chinese immigrant elderly; GDS-15 implementation shows that the rate of EL is from 20% to 30%. This result has practical implications for clinicians in using these tools to screen for the elderly.

ICD-10 diagnostic criteria for depression

In Vietnam, in recent years, the diagnosis of schizophrenia has been applied according to the principles of diagnosing depressive episodes described in ICD-10. The World Health Organization ICD-10 diagnostic criteria for depression (1992) have clinical value for diagnosing various degrees of depression (mild, moderate and severe) and are used for many community studies.

In the ICD-10, depression is classified in section F.32, under the category of mood disorders, depression includes the following 3 typical symptoms (decreased mood, Loss of all interest and enjoyment, and reduced energy leads to increased fatigue and decreased activity) and 7 common symptoms (includes: decreased concentration and attention; decreased self-esteem and confidence; guilty ideas and no worthy; feeling bleak and pessimistic in the future; self-harm or suicidal ideas and behavior; sleep disturbance; eating less appetizing). Moreover, depression was classified into several degrees: (1) Mild depression is characterized by the presence of two-thirds of the typical symptoms and two out of seven common symptoms, which persist for a minimum duration of two weeks. Patients

experiencing mild depression encounter challenges in maintaining their regular work and social engagements, yet they are likely to exhibit physical activity, regardless of the presence or absence of depressive symptoms. (2) Moderate depression is characterized by the presence of two-thirds of typical symptoms and with three-sevenths common symptoms. These symptoms persist for a minimum duration of two weeks and result in significant challenges in both familial and occupational domains, with or without accompanying physical manifestations of sadness. (3) Severe depression is characterized by the presence of three out of four typical symptoms and at least four out of seven common symptoms. These symptoms are prevalent and remain for a minimum of two weeks. Additionally, patients often have body syndrome and are less likely to maintain their involvement in family, social, and professional activities. (4) A major depressive episode accompanied by psychotic symptoms is characterized by the presence of delusions, hallucinations, or stupor symptoms, as outlined in the criteria for a major depressive episode.

Ethical statement: The research methodology employed in this study aligns with the ethical norms of confidentiality and humane treatment, as delineated in the Declaration of Helsinki. The study protocol obtained clearance from the Ethical Committee of the University of Da Nang, Vietnam (unique identification number: 01/2019/HĐ-ĐTKHCN)

RESULTS

Post-intervention changes in the expression level of depression in the elderly in Quang Ngai City

Table 1 shows that the severe level was no longer in the elderly, the moderate level decreased from 28.6% to 9%, and the mild level from 69.4% to 42.8%. There are 19 elderly people (38.8%) returning to normal state. The extent of the most profound change was from mild and moderate to normal.

The number returned to normal 39% and only 61.2% showed signs of depression. This result shows that there was a significant change after the community intervention to prevent depression for the elderly. In which, moderate level was 18% and mild level was 43%. Score according to GDS scale pre-experiment was $M = 9.5$, post-experiment decreased to $M = 8.0$. In which, there were 15 elderly with GDS score below 6 (accounting for 30.6%).

Table 1: Post-intervention changes in the expression level of depression in elderly in Quang Ngai City

Level	Tinh Thien Village		Truong Quang Trong Ward		Total	
	Pre-experiment	Post-experiment	Pre-experiment	Post-experiment	Pre-experiment	Post-experiment
Severe	1 (4.3)	0 (0)	0 (0)	0 (0)	1 (4.3)	0 (0)
Moderate	6 (26.1)	5 (21.7)	8 (30.8)	4 (15.4)	14 (28.6)	9 (18.4)
Mild	16 (69.6)	11 (47.8)	18 (69.2)	10 (38.4)	34 (69.4)	21 (42.8)
Normal	0 (0)	7 (30.4)	0 (0)	12 (46.1)	0 (0)	19 (38.8)
Total	23	23	26	26	49	

Figures in the parenthesis indicate percentage.

Comparison of the results pre-experiment and post-experiment on the level of depression in the elderly in Quang Ngai City

Experimental results show that there was a statistically significant difference between pre-intervention and post-intervention program to prevent depression for the elderly (Table 2).

The data table shows that the elderly participating in the depression prevention intervention model have had positive changes. That change was reflected in the mean score of depression through 2 assessments (GDS-15 scale and ICD-10 clinical assessment) both showed a significant reduction. GDS-15 had a score reduction from $M = 9.6$ ($SD = 2.75$) to $M = 7.8$ ($SD = 4.3$), $p = .005$ and ICD-10 had a score reduction from $M = 2.3$ ($SD = 0.51$) to $M = 1.7$ ($SD = 0.73$), $p < .000$. This result indicated that there was a significant difference between pre-intervention effect and post-intervention effect on both pre- and post-assessment measurement methods.

Gender difference between pre-experiment and post-experiment on the depression in the elderly

Table 3 demonstrated that gender also showed a difference in the process of intervention. The pre- and post-intervention assessments had significant differences, especially in female with the mean score of the scale having a decline from $M = 9.6$ ($SD = 2.8$) to $M = 7.6$ ($SD = 4.3$), $p < .005$. This difference was also reflected in the fact that females tended to change more than the males, in which males decreased from $M = 9.5$ ($SD = 2.8$) to $M = 8.5$ ($SD = 4.5$), $p > .005$. This difference was not significant. However, the clinical diagnoses was significantly different in both males ($p = 0.003$, $p < .005$) and females ($p < .000$) with pre-experiment mean score of both males and females had 0.6 higher than the post-experiment mean score of both males and females.

Differences in age between pre-intervention and post-intervention

Through the ICD-10 assessment, there was a decline in the mean score's pre-experiment and post-experiment at all ages. At the age 61-70, mean of pre-experiment was 2.27 ($SD = 0.45$) and mean of post-experiment was 1.78 ($SD = 0.75$), $p = .005$. At the age of 71-80, mean of pre-experiment was 2.41 ($SD = 0.58$) and mean of post-experiment was 1.75 ($SD = 0.73$); $p = .001$, $p < 0.05$. This result showed that the program had meaningful impact for all ages, suitable with age psychological characteristics and led to a reduction in depressive symptoms in the elderly.

When comparing the ages before and after the impact through clinical assessment, no difference between the ages was found. However, compared by GDS-15, there were differences between the ages.

After the intervention, there was a difference between the age above 80 and the age of 60-70 ($p = .046$, $p < .05$) with $M = 4.727$ ($SD = 2.306$). The result led to the

impact on the elderly aged 60-70 which was easier to change compared to those over 80 years old. With pre-GDS-15 assessments, the age of 71-80 and the age of above 80 also had a significant difference ($p = .029$, $p < 0.05$) with $M = 3.208$ ($SD = 1.42$). With objective and reliable assessments based on the GDS-15 scale and the clinical diagnosis of doctors at Quang Ngai Psychiatric Hospital, it is clear that there was a statistically significant difference in the elderly in Quang Ngai City, GDS-15 data may skew with the clinician's ICD-10-based clinical diagnosis, but clinical data are definitive data indicating a decline in symptoms and indices of depression in the elderly.

Table 2: Comparing the pre-intervention and the post-intervention effects through GDS and ICD-10 (n=49)

Scale	Pre-experiment M ± SD	Post-experiment M ± SD	P value
GDS	9.6 ± 2.75	7.8 ± 4.3	0.005
ICD-10	2.3 ± 0.51	1.7 ± 0.73	<0.001

Statistical significance was calculated using t test

Table 3: Comparing the difference between pre-experiment and post-experiment on gender

Gender & Scale	Pre-experiment M ± SD	Post-experiment M ± SD	P value
Male (n=14)			
GDS	9.5 ± 2.8	8.5 ± 4.5	0.178
ICD-10	2.3 ± 0.49	1.7 ± 0.8	0.003
Female (n=35)			
GDS	9.6 ± 2.8	7.6 ± 4.3	0.015
ICD-10	2.3 ± 0.53	1.71 ± 0.71	0.000

Statistical significance was calculated using t test

Table 4a: Comparing the difference between pre-experiment and post-experiment in terms of age

Age (yrs)	Pre-experiment M ± SD	Post-experiment M ± SD	P value
71-80 (n=23)	2.41 ± 0.58	1.75 ± 0.73	0.001
61-70 (n=22)	2.27 ± 0.45	1.78 ± 0.75	0.005

Statistical significance was calculated using t test

Table 4b: Comparing difference between age groups

Age group		M ± SD	P value
Pre-GDS-15			
60-70y	vs 71-80y	-1.32 ± 0.78	0.095
	vs >80y	1.89 ± 1.43	0.194
71-80y	vs 60-70y	1.32 ± 0.78	0.095
	vs >80y	3.21 ± 1.42	0.029*
Above 80y	vs 60-70y	-1.89 ± 1.43	0.194
	vs 71-80y	-3.21 ± 1.42	0.029*
Post-GDS-15			
60-70y	vs 71-80y	1.06 ± 1.25	0.401
	vs >80y	4.73 ± 2.31	0.046*
71-80y	vs 60-70y	-1.06 ± 1.25	0.401
	vs >80y	3.67 ± 2.29	0.116
Above 80y	vs 60-70y	-4.73 ± 2.31	0.046*
	vs 71-80y	-3.67 ± 2.29	0.116

*Statistically significant (p<0.05) calculated using t test

Table 5a: The results of pre-experiment and post-experiment according to the GDS-15

Study Group	Pre-experiment		Post-experiment	
	M ± SD	p	M ± SD	P value
Control	9.77 ± 2.687	0.694	7.40 ± 4.507	0.246
Experimental	9.13 ± 2.569		5.97 ± 4.030	

Statistical significance was calculated using t test

Table 5b: The results of pre-experiment and post-experiment according to the ICD-10 assessment

Study Group	Pre-experiment		Post-experiment	
	M ± SD	p	M ± SD	P value
Control	2.03 ± 0.183	<0.001	1.57 ± 0.697	0.018
Experimental	2.30 ± 0.466		1.37 ± 0.490	

Statistical significance was calculated using t test

Table 5c: The results of changes in depression levels post-intervention compared with the Control Group

Pre-experiment depression level	Post Experiment depression level		
	Normal (%)	Mild (%)	Moderate (%)
Experimental Group			
Mild	14 (66.7)	7 (33.3)	0 (0)
Moderate	5 (55.6)	4 (44.4)	0 (0)
Total	19 (63.3)	11 (36.7)	0 (0)
Control Group			
Mild	16 (55.2)	10 (34.5)	3 (10.3)
Moderate	0 (0)	1 (100.0)	0 (0)
Total	16 (53.3)	11 (36.7)	3 (10.0)
Total			
Mild	30 (60.0)	17 (34.0)	3 (6.0)
Moderate	5 (50.0)	5 (50.0)	0 (0)
Total	35 (58.3)	22 (36.7)	3 (5.0)

Figures in the parenthesis indicate percentage.

Comparison of the Experimental Group and the Control Group

The analysis results from Table 5a indicate that, when measuring with the GDS-15, it showed that both the Experimental Group and the Control Group have a positive change in improving depression. Accordingly, in the Experimental Group, there was a decrease in the level of depression with the mean score of pre-experiment was 3.16 higher than post-experiment ($M = 9.13, SD = 2.569; M = 5.97, SD = 4.030$). Inwhile, for the elderly in the Control Group, the mean score difference was 2.37 in which mean score of pre-experiment was 9.77 ($SD = 2.687$) and mean score of post-experiment was 7.40 ($SD = 4.507$). In particular, for the Experimental Group in post-experiment, the mean score fell below the level of no signs of depression ($M = 5.97, SD = 4.030$), while the control group still had symptoms of depression, sensitivity has decreased ($M = 7.40, SD = 4.507$). This proves that, in addition to the regular use of medication, interventions through psychosocial therapies are important in reducing the level of depression in the elderly.

Moreover, through the clinical diagnosis of the hospital, the research results show that in pre-experiment, the Control Group had the level of depression with $M = 2.03 (SD = 0.183)$; while the Experimental Group

with $M = 2.30 (SD = 0.466)$, in post-experiment, both the Control Group and the Experimental Group had a reduced level of depression, in which the level of depression in the Experimental Group decreased more ($M = 1.37, SD = 0.490$) compared with the Control Group ($M = 1.37, SD = 0.679$) (Table 5b).

On the other hand, the results of Independent T-test (Table 5b) showed that there was a statistically significant difference between pre-experiment and post-experiment of the Control Group and the Experimental Group. Accordingly, pre-experiment [$t(58) = 2.981, p = .000$], the Experimental Group had a higher level of depression than the control group, then after conducting the experiment [$t(58) = -1.038, p = .018$], the depression level of the Experimental Group decreased significantly. Besides that, the difference in mean scores between the two Control and Experimental Groups in pre-experiment and post-experiment indicated that, the mean score of the Control Group only decreased by 0.46 ($M = 2.03, SD = 0.183; M = 1.57, SD = 0.697$), the Experimental Group decreased by 0.93 ($M = 2.30, SD = 0.466; M = 1.37, SD = 0.490$). Thus, psychosocial therapies in community interventions have had a significant impact on reducing the level of depression in the elderly. The results of the Paired-Sample T-test also show that there was a significant difference [$t(29) = 7.992, p = .000$] of the Experimental Group in pre-experiment and post-experiment. Accordingly, the combined application of community intervention therapies has a positive meaning in reducing depression for the elderly.

Table 5c shows that, in the Experimental Group ($N=30$), there were 19 elderly people who have returned to normal state (of which 14 elderly people have mild state returned to normal state, 5 people from moderate to normal state were 5 elderly people), accounting for 63.3%. None of the older people were in moderate state. Meanwhile, the Control Group ($N=30$) had 16 elderly people returning to normal state (55.2%) from mild level. The remaining 10 elderly people (34.5%) had a mild level, but there was no change, 1 elderly person changed to moderate level. In addition, there were 3 older people who changed from mild to moderate state (10.3%). Thus, it can be confirmed that the change of the elderly in the Experimental Group post-experiment had a positive trend. In the Control Group, there was also a certain change due to the impact of factors, the collaborators of the area who were also trained to intervene, and other positive factors of the family and society, showing was most pronounced in the group with mild depression. However, in the Control Group, there were cases of older people had symptoms of mild depression change to moderate depression (10.3%).

DISCUSSION

This study aimed to examine the efficacy of the community intervention strategy in avoiding depression among the elderly in Quang Ngai City. Based on the

available data, the inquiry reached these following conclusions: (i) post-intervention change in the expression level of depression in the elderly; (ii) Comparison of the results pre-experiment and post-experiment on the level of depression in the elderly; (iii) Differences in gender between pre-experiment and post-experiment; (iv) Differences in age between pre-experiment and post-experiment; (v) Comparison of the Experimental and the Control Group.

The first field was post-intervention change in the expression level of depression in the elderly. With post-intervention change in the expression level of depression in the elderly, the mild state of depression had a significant change in the post-intervention. This result also partly proves the effectiveness of the community intervention model to prevent depression in the elderly. Specifically, the effectiveness represents through emotional and physical performance of elderly in the post-intervention. In general, through the topics of community activities, it can be seen that most of the participating elderly had positive improvements, they were happier and more comfortable when they first arrived, happily greeted and asked each other when they first arrived or came home. Observable appearance was cheerful face; comfortable communication; had positive energies; willing to share, had fun; had a more open, positive view of themselves and the people around them. They were all very interested in and attentive to the program, but they were more than timid and less open. Partly because they were afraid to communicate and partly because the elderly were not in good health, their participation level was also somewhat limited. When asking questions, they all enthusiastically performed their tasks and answered questions when required. In addition, most of the elderly wanted to improve their mental and physical health, and participated in activities to have the opportunity to listen and share. Through the above topics of community activities, it can be seen that the topics have basically shown the activities in the community intervention program to prevent depression. Similar to this findings, Lim, Chang, Yu, Chiu, Chong and Kua⁶ conducted a research with the elderly in Singapore, specifically, as part of their community intervention activities, the elderly who face at least one of the life stressors are encouraged to engage in an intervention study that facilitates bonding and emotional bonds. This intervention study will aid in recommending social measures to mitigate the negative impacts of stressors on the mental and physical health of the elderly.⁶ Likewise, Jacob, Abraham, Abraham and Jacob²⁹ also reported that after three months, there was a significant decrease in psychiatric morbidity and an improvement in quality of life scores for participants in the community intervention program, it helped to improve quality of life.

The second field was Comparison of the results pre-experiment and post-experiment on the level of depression in the elderly. With the Comparison of the results pre-experiment and post-experiment on the level of depression, the elderly participating in the

depression prevention intervention model have had positive changes. That change was reflected in the mean score of depression through 2 assessments (GDS-15 scale and ICD-10 clinical assessment) both showed a significant reduction. With this intervention model, in addition to noticing changes through the expression of behavior and emotions. In this result, we can see that this positive change trend is shown through the results of the GDS-15 scale and clinically evaluated under the criteria of ICD-10. Consistent with Gao, Jin, Unverzagt, Liang, Hall, Ma, Murrell, Cheng, Matesan and Li³⁰, the continuous GDS outcome enabled the authors to uncover characteristics that may be related to depressed symptoms in a dose-dependent manner or that exert a relationship below the threshold for mild or severe depression.

The third field was Differences in gender between pre-experiment and post-experiment. With the Differences in gender between pre-experiment and post-experiment, gender also showed a difference in the process of intervention, especially, this difference was also reflected in the fact that females tended to change more than the males. Older women tend to be more prone to depression than men.³¹⁻³⁶ Women had a higher depression score than men.³⁷ In the general population, women experienced more depressive symptoms than males. Nevertheless, the gender disparities in the number of depressive symptoms in the general population were completely explained by gender differences in psychosocial characteristics such as family status.³⁸ Depression elderly women experienced hunger disorders more frequently than men, while sad elderly men experienced agitation more frequently than women.³⁸ Forsell, Jorm and Winblad³⁹ showed that old women had more mood-related symptoms, including eating problems, while elderly men had more motivation-related symptoms, including psychomotor abnormalities. Silverstein⁴⁰ found that women were more likely to exhibit the entire somatic syndrome according to ICD-10 criteria, which includes sleep difficulty, tiredness, and food disturbance.

The fourth field was Comparing the difference between pre-experiment and post-experiment in terms of age. With the Comparing the difference between pre-experiment and post-experiment in terms of age, the result led to the impact on the elderly aged 60-70 which was easier to change compared to those over 80 years old. Individuals do not develop depression because of aging alone.⁴¹ This variation may result from the fact that the clinical manifestations of depressive symptoms in the elderly vary with age, from young-old to old-old.⁴² For instance, the elderly may be more susceptible to incapacity or medical conditions as they age.⁴³ Chronic illness is an independent factor that influences depression.⁴⁴ Besides, community intervention, treatment by another methods. In study of Reynolds III, Frank, Perel, Imber, Cornes, Miller, Mazumdar, Houck, Dew and Stack⁴⁵, 90% of elderly patients with major depression in remission who were maintained on placebo experienced a

relapse within three years, compared to 20% of those who were maintained on nortriptyline and interpersonal psychotherapy and 43% of those who received nortriptyline and medication clinic visits. Inconsistent with our findings, Son, Cho, Cho, Ryu and Kim⁴⁶ reported that social support significantly moderated the connection between loneliness and depression among the old-old, whereas no such effect was observed among the young-old.

The final field was Comparison of the Experimental and the Control Group. With the Comparison of the Experimental and the Control Group, this demonstrates that, in addition to the regular use of medication, psychosocial therapy interventions are crucial for reducing the prevalence of depression in the elderly. Moreover, community-based psychosocial therapy has had a considerable influence on reducing the prevalence of depression among the elderly. The treatment of geriatric psychiatric disorders and symptoms will become increasingly dependent on psychosocial therapies.⁴⁷ Increasing life expectancy and the resulting medical comorbidity can complicate the use of medication in a substantial proportion of older individuals. In addition, increased handicap and psychosocial deprivation are anticipated to cause a growing percentage of elderly to endure stress. Psychotherapeutic therapies have the ability to assist elderly individuals in developing coping strategies for hardship in life.⁴⁷ Depression may respond to “non-specific” psychosocial therapies such as exercise and socialising.⁴⁸⁻⁵⁰ According to a study conducted by Ciechanowski and colleagues on community-dwelling older persons with mild depression, an intervention emphasizing increased physical and social engagement resulted to “much lower severity and greater remission” than standard therapy.⁴⁸ Another study discovered that treating these patients with social contacts, with or without physical activity, led to increased mood and mental health quality of life assessments.⁴⁹ Those whose depression does not respond to such treatment, however, require alternative therapies. According to Mackin and Arean, in 1991 “the National Institutes of Health consensus statement on the treatment of late-life depression ranked psychotherapy third in a line of treatment options, after antidepressant medication and electroconvulsive therapy, indicating that there was insufficient evidence to recommend psychotherapy as a first-line treatment for older adults”. Since then, further study has been conducted on the efficacy of psychotherapy, both as a stand-alone treatment and in conjunction with medicine. Cognitive behavioral therapy and interpersonal therapy are the two psychotherapies with the most research.

CONCLUSION

There is an objective factor that affects more or less the post-intervention assessment in the Experimental Group which was conducted to take advantage of the time after the gap of directive 15 in Quang Ngai city,

the vast majority of the elderly in commune, intervention wards through a long period of blockade also have more or less negative effects from this problem, so when re-evaluated, the manifestations of changes have changed, but the extent is not much. That is also the limitation of the topic in community intervention when there are change agents that are difficult to control. From the above positive results, it can be confirmed that the depression prevention intervention program for the elderly in Quang Ngai city is practical and can help reduce symptoms, severity and reverse depression in elderly. Thus, the model can be widely applied to localities throughout Quang Ngai City.

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