The Effect of Home-Based Lifestyle Change Program toward Quality of Life among Aging People in Khonkean Province, Thailand

YODMAI Korravarn¹, SOMRONGTHONG Ratana², DANSAWASDIKUL Tipawan³

ABSTRACT: Thailand is currently becoming to be "the aging society". Khonkean province is the second highest of aging people in Northeast of Thailand. Previous studies found that aging people had moderate quality of life. This study aims to assess the effect of home-based lifestyle change intervention on quality of life among elderly in the rural of Khonkean province, Thailand. This quasi-experimental study was employed. A triple -E education (Exercise, Eating healthy food, and Emotional management) was implemented in the intervention village. 110 elderly participants (aged 60-75 years) were recruited from two selected villages in Khonkean province. One village was assigned as an intervention village and the other was the control village. The evaluations of the triple –E education were conducted at 6th month and 9th month after intervention. Quality of life was assessed using WHOQOL-OLD questionnaire with composed of 6 facets (SAB, AUT, PPF, SOP, DAD, and INT). Linear Mixed Model analysis was use to compare a mean difference of intervention at difference time. The results revealed that the score changed were found in five facets of WHOQOL-OLD at the 6th month intervention (AUT, PPF, SOP, DAD, and INT; p-value < 0.05). At 9th month of the intervention, the score changed were found in four facets of WHOQOL-OLD (AUT, PPF, SOP, and DAD; p-value < 0.05). The home-based lifestyle program was affected to elderly's quality of life in some facets. For the further study should observe the long term of home-based lifestyle change program.

Key word: elderly, home-based lifestyle, quality of life

INTRODUCTION

The proportion of aging is continues increasing in Thailand (UNFPA, 2008. Khonkean province is the second highest of aging people in Northeast of Thailand (1). The National Health Examination Survey in 2008 - 2009 showed that more than half of the elderly faced with chronic diseases, these were hypertension, metabolic syndrome, obesity, hyperlipidemia, and diabetes (2). Some studies in Thailand found that aging people in northeast of Thailand live alone or living with grandchild because of their children temporary moving outside province to working in central of Thailand (3). In addition, many studies indicated that chronic diseases affect elderly and are associated with disability and diminished quality of life. This study aims to determine the effects of home-based lifestyle change intervention on quality of life among elderly in rural of Khonkean province, Thailand.

¹ College of Public Health Science, Chulalongkorn University, Bangkok, Thailand, email: korravarn.y@hotmail.com

² College of Public Health Science, Chulalongkorn University, Bangkok, Thailand, e-mail: ratana.so@chula.ac.th

³ College of Asian Scholar, Khonkean province, Thailand, email: tipawan@cas.ac.th

METHODS

Study design: This quasi-experimental study was assessing the effect of home-based lifestyle change program on improvement the quality of life among aging living in 2 selected districts in rural of Khonkean province.

Intervention: A home-based lifestyle change program which consisted of "A triple – E education" (Exercise, Eating healthy food, and Emotional management) was implemented for 9 months period. 110 elderly aged 60-75 years who resided in two selected villages at least one year were recruited from Somsung district (intervention) and Numpong district (control). For the intervention village, the participants were divided into 5 groups according the resident areas. Two team leaders of each group were trained the empowerment techniques for promoting a triple-E education. They were assigned for providing the triple –E education during the home visiting to their member weekly for 6 months period. Monthly meeting was conducted in the studied villages. For control village, the routine education program was provided. The evaluation was conducted at 6th month and 9th month after intervention to compare with the based-line data. Quality of life was assessed using WHOQOL-OLD (4).

Instruments: The measurement tool of quality of life was used WHOQOL-OLD questionnaire. It consists of 6 facets (sensory ability [SAB], autonomy [AUT], past/present & further activity [PPF], social participation [SOP], death & dying[DAD], and intimacy facets [INT). In term of quality of life scores for the elderly people, the higher scores mean better quality of life (4, 5).

Statistical Analysis: The statistical packaged SPSS for Windows, version 16 was utilized for the statistical analysis. Descriptive statistics were presented by frequency, percent, mean, and standard deviation. Mixed Model ANOVA was conducted to compare the mean difference between the intervention and control group (6).

RESULTS

The findings revealed that most of the respondents in the intervention and control group were females (54.5% and 81.8%, respectively). The two groups had comparable at baseline characteristic, however, they were some variables were statistically significant (e.g. gender, employment status). At the baseline, majority of elderly in the intervention group and control group stated that their quality of life were moderate level (84.60% and 72.70%, respectively). The triple-E education intervention was implemented for 9 months. The effectiveness was assessed at 6th and 9th month of the interventions. Mixed model analysis was used to compare the effects side or mean changed during intervention at difference time. Intervention effects were adjusted for socioeconomic variable and six facets of the quality of life. The results revealed that the score changed were found in five facets of WHOQOL-OLD (autonomy, past/ present & further activity, social participation, death & dying, and intimacy facets) at the 6th month intervention (p-value < 0.05). At the 9th month of the intervention, the score changed were found in four facets of WHOQOL-OLD (autonomy, past/present & further activity, social participation, and death & dying; pvalue < 0.05). However, there was no statistical significant difference in the total score of quality of life (table 1).

Table 1: Mean baseline and mean change on quality of life in 6 facets between intervention and control group at difference time

Variable	Intervention effects				
	Overall at baseline Mean (SD)	Follow up 1(6 month)		Follow up 2 (9 month)	
		Magnitude (95% CI)	P-value	Magnitude (95% CI)	P-value
TQOL	79.12(11.08)	-6.3 (-14.7-2.0)	0.13	-2.0 (-8.7-4.7)	0.56
SAB	11.17(3.41)	-0.7 (-1.3-1.7)	0.54	0.7(-2.7-2.9)	0.47
AUT	14.46(2.47)	-2.8(-4.7-(-0.9))	< 0.01	-1.8(-3.3-(-0.3))	< 0.01
PPF	14.43(2.69)	-1.4(-3.2-0.3)	0.12	-1.5(-3.1-(0.0)	0.05
SOP	14.35(2.79)	-1.5(-3.0-(-0.1)	0.03	-2.0(-3.6-(-0.4)	0.01
DAD	9.66 (3.71)	2.5(0.03-5.1)	0.05	4.1(1.3-6.8)	< 0.01
INT	15.01(3.33)	-2.0(-4.0-(-0.1)	0.03	-1.4(-3.5-0.5)	0.16

Note: TQOL = total quality of life, SAB= sensory of ability, AUT = autonomy, PPF = past/ present & further activity, SOP= social participation, DAD = death & dying, and INT =intimacy facets

CONCLUSION/RECOMMENTATION

Based on the results of this study, it can be concluded that the home-based intervention was affected in some facets of quality of life included autonomy, past/present and further activity, social participation, death & dying, and intimacy. After 6 month of intervention, all facets score was increased. In contrast, after 9 month of intervention; three facets included SAB, DAD, and TQOL score were slightly decreased. According to the findings, SAB which referred to sensory functioning, impact of loss of sensory ability on quality of life and DAD (death and die) showed the statistic significant difference. These significant might related to; the concern, worry and fears about their mobility and death and dying, Therefore physical health care equipment (e.g. handgrips, handrail, walker, and wheel chairs) and social support (e.g. physical, psychological, information, and instrument supports) need to be taken into account in order to improve quality of life in the elderly. For the further study, observation in the long term of home-based lifestyle change program is needed.

REFERENCES

[1] National Statistical Office [NSO], Thailand. 2010. Thai population migration survey report, 2010. Bangkok: NSO. (in Thai)

- [2] National Health Examination Survey Office (NHESO) in Thailand (2009). National health survey report, Thailand Round 4, 2008-2009. Bangkok: The Grahphico Company Printing. (in Thai).
- [3] Jitapunkul S, Kunanusont C, Phoolcharoen W, Suriyawongpaisal P, & Ebrahim S. (2003). Disability-free life expectancy of elderly people in a population undergoing demographic and epidemiologic transition: Age and Ageing. 32(4): 401-405.
- [4] World Health Organization [WHO] (2004). WHO-QoL-Old manual. Copenhagen: WHO European office.
- [5] The WHOQOL Group [WHO] (2005). Development of the WHOQOL-OD module; Quality of life research, 14, 2197-2214.
- [6] Yasui Y, Feng Z, Diehr P, McLerran D, Beresford SA, McCulloch CE (2004). valuation of community-intervention trials via generalized linear mixed models. Biometrics. 2004 Dec;60(4):1043-52.