An Innovative Initial Assessment for Community Health Nurse to Conquer Depression in Elderly Who Loss of Spouse by Empowering Community Health Cadres

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ABSTRACT

High quality of life is one of indicators country classified as developed country. Education moreover life expectancy has become prominent to support. Depression tends to cover with physical complaints so it is hardly enough to detect. One of depression predispositions is caused by loss of spouse that reduces elderly's quality of life. Unidentified depression in elderly caused decreasing of life expectancy due to incident of suicide. The descriptive correlative method was used with cross sectional approach. Involving sample were 80 elderly in Depok, Indonesia with stratified random sampling. The research instrument used Geriatric Depression scale to measure the level of depression. The result of Mann Whitney Test proved a significant relationship between loss of spouse and level of depression in elderly, p value shows 0.007 α < 0.05. Conducting an innovative initial assessment module for community health nurse (CHN) is a need. One of the best solutions to uphold that CHN innovation for elderly is by empowering community health cadres to approach families in order to prevent depression. Besides, it engages cadres to make events in elderly group who losing spouse in collaborating with CHN.

Keywords: CHN, depression, elderly, empowering cadres, GDS, loss of spouse

1. INTRODUCTION

Decreased in quality of life in elderly is influenced by loss of spouse factor. The result of Haryono (2008) study found the elderly who lost the life partner due to death that is 58,6% in widow 77,5% and 22,3% widower. Loss of spouse in the elderly is one cause of depression. According to the World Health Organization (WHO) in Barg, Huss-Ashmore, Wittink, Murray, Bogner, & Gallo (2006) severe depression will be the second highest disease in the world by 2020 after heart disease. In developing countries, unipolar depression will be the top in 2020 in place of lower respiratory tract diseases as the top (Amir, 2005).

Elderly with loss of spouse in vulnerable communities experience depression. The result of Henuhili (2004) in Cibubur showed that the elderly who lost the couple was 25%. The result of Wulandari (2010) also stated the proportion of elderly who lost a couple and experienced depression is 52%. Depression in the elderly can lead to suicidal behavior. The National Institute of Mental Health in Nevid, Rathus & Green (2010) found that the incidence of suicides increased to 75% in the depressed elderly. The result of this study is also supported by data from WHO (2013) which shows an average of 1 million people worldwide committing suicide each year due to depression dominated by older people aged over 75 years.

Grieving and losing a partner in nursing science is part of the concept of values and beliefs. Loss is a process of continuity in the later stages of development characterized by the individual being separated by something he or she has including the spouse (Lueckenotte, 2006; Miller, 2012). Loss of spouse that consists of life or death separation included affects the elderly psychological problem. The effectiveness of coping mechanisms in the grief stage is strongly influenced by the belief in loss, so that nursing science is

required to minimize its negative impact (Miller, 2012).

Elderly depression in the community tends to be disguised by other diseases that need to be assessed (Miller, 2012). For example, elderly depression has a complaint of decreased appetite and sleep disorder usually associated with medical illness due to aging process, not as a sign of actual depression (Lueckenotte, 2006). Therefore, research on the association of loss of partners with depression levels in the community is needed to achieve improved quality of life of the elderly. The role of nursing science becomes important to engage in efforts to prevent depression and reduce mortality.

2. METHODOLOGY

Geriatric Depression Scale (GDS) is one of the elderly measuring tools to determine the level of depression elderly. The instrument has been developed into two GDS-SF instruments with 15 question items and GDS-LF with 30 questions (Yesavage et al., 1983 in Greenberg, 2012). Geriatric Depression Scale-Long Form (GDS-LF) was used in this study by using modifications according to Indonesian culture because it has several uses. This instrument has a dichotomous answer column that makes it easy for respondents to answer. GDS has also been tested for validity and reliability with correlation (r = 0.84, p <0.01) and 92% sensitivity and 89% specification in diagnosis (Greenberg, 2012).

The question type has different points. The result of the assessment using GDS is stated by scoring the value 1 in favorable statement with the answer "yes" and on unfavorable the answer "no" is given score 0 (Knight & Qualls, 2006). The favorable question consists of question numbers 2, 3, 4, 6, 8, 10, 11, 12, 13, 14, 16, 17, 18, 20, 22, 23, 24, 25, 26, 28. Unfavorable questions are at numbers 1, 5, 7, 9, 15, 19, 21, 27, 29, 30. Because of the many uses of the Geriatric Depression Scale (GDS) instrument, researchers using relevant GDS with modification based on Indonesian culture to know the elderly depression level.

When modified the instrument, researchers tested the validity and reliability of GDS first. Instrument validity test was conducted on 30 respondents at Pancoran Mas Community Health Center that housed Depok Village. The area is choosen to be a place of validity test because it has respondent characteristics in accordance with the study with the consideration of the respondents of the test instrument is not included in the actual data research respondents. The question item with 30 respondents shows valid with the value of r table product moment <0.361 (Hastono, 2007; Dahlan, 2010). Based on the result of the test instrument, there are 14 items of question that the value of r <0.361 is at number 1, 2, 10, 11, 12, 14, 20, 21, 22, 24, 27, 28, 29, and 30. It means those items are invalid or unable to measure the things that want to be measured on the respondent (Hastono, 2007). The invalid questions then looks at the quality aspects of the question items as a consideration for improved quality of questions by simplifying the language, avoiding stacked sentences that give rise to meaning bias, as well as clarifying what confuses respondents during the study.

Researchers continue with the reliability test. Reliability test is an index that shows the trust or reliability of the measuring instrument research (Dahlan, 2010; Hastono, 2007; Notoadmojo, 2010). This test determines the extent to which the measurement results remain consistent when measurements are made twice or more. To know the reliability of research conducted cronbach alpha test. The value of cronbach alpha ≥ 0.6 signifies a reliable variable, if the value ≤ 0.6 means the variable is not reliable (Dahlan, 2010; Notoadmojo, 2010). The results of 30 respondents obtained cronbach alpha value of 0.835 of 30 items question instrument Geriatric Depression Scale (GDS). This means that the variables in the instrument are reliable because the standard cronbach alpha ≥ 0.6 (Dahlan, 2010; Notoadmojo, 2010). Assessment of cronbach alpha is reviewed using computer software.

3. RESULTS

Researchers collect data, process and analyse the data. Bivariate analysis uses in this study to know the relationship between two variables studied. Analysis of two variables used statistical Mann Whitney test connecting categorical and numerical variables. The variable is the loss of spouse (independent) and depression in the elderly (dependent).

The result of two variables shows abnormal data distribution. The variable loss of spouse has the value of skewness divided by the standard error is ten (value ± 2). Viewed from the histogram graph, the shape does not resemble a bell shape. This indicates that the distribution of data is not normal (Hastono, 2007 & Notoadmojo, 2010). The variables of depression in elderly have skewness value and standard error ≤ 2 and normal curve. This indicates that the distribution of evenly distributed level variables of depression or distribution of normal data. The researchers used a non parametric test alternative with the Mann Whitney

test approach. Non parametric test is used because it can analyze the distribution of abnormal data. While the non parametric type chosen is Mann Whitney test because it can know the relationship of categorical and numerical variables (Sugiyono, 2007; Notoadmojo, 2010). Therefore, the researchers only categorize the variable loss of spouse, while the depression level in the analysis by using numerical analysis of the GDS assessment.

The result of Mann Whitney test is aimed to find out the correlation between two variables is statistically significant or not significant. The direction of this hypothesis test is two tails which only states the relationship between two variables tested. If $\rho < \alpha$ then there is a significant relationship between the loss of spouse with depression in elderly (Hastono, 2007; Notoadmojo, 2010) Analysis of research using computer statistics program (software).

The result of Bivariate Analysis is done to know the relationship of two research variables. The analysis was done by using Mann Whitney test to find out the correlation between lost of spouse variable (independent variable) and level of elderly depression (dependent variable) in Depok. The degree of confidence used is 95% (α = 0.05) so that if p value <α, then the two variables studied have a meaningful relationship, vice versa. The following results show the results presented in table 1.

Table 1 Correlation between loss of spouse and level of depression in Depok 201(n=80)

Loss of spouse	Level of Depression		p *value*
	N	Mean	
Death	73	11,99	
Divorce	7	17,86	0,007
total	80		

Table 1 shows the average score of depressed elderly due to divorce of 17.86. It can be drawn the conclusion that the elderly who experience depression more in loss of spouse because of divorced. This can be caused by several factors such as multiple stressors on interpersonal relationships, economic burden, or family culture obtained by the elderly with divorced spouses. In addition, statistical test results obtained p value <α (0.05) so it is concluded that there is a significant relationship between the loss of spouses with depression levels in elderly in Depok Village.

Table 2 Level of Depression in Elderly, Depok (n = 80)

Variable	Mean- Median	Standard Deviation	Minimun- Maximum	95% CI
Level of depression	12,5-12	5,282	2-25	11,32- 13,68

Based on the results of the analysis Table 2 obtained data that the average depression score of respondents is 12.5 with a standard deviation of 5.282. The highest depression score is 25. From the estimation result, it can be concluded that 95% is believed that the average score of the depressed level of respondents is from 11.32 to 13.68.

Table 3 Level of eldery depression (catagoric) at Depok, 2014 (n=80)

Variable Depression Level	N	Precentage (%)
Normal	25	31,2%
Mild depression	47	8,8%
Severe depression	8	10%
Total	80	100%

Based on the results of the analysis Table 3, it obtained data that 47 elderly (58. 8%) in Depok Village experienced mild depression, while 10% of elderly depression was heavy. This explains that more than half of the elderly in the area have been identified as depressed.

4. DISCUSSION

The analysis resulted of the elderly who loss describes the uneven distribution of data indicated by the percentage of couples died higher than the divorce. This is in accordance with data from BPS Republic of Indonesia in National Commission for Elderly (2010) that elderly with loss of spouse due to death is 38.95% and divorce live 2.16%. It is also supported by the Administration of Aging (2001) in Papalia, Olds, & Feldman (2007) which states that the loss of spouses due to divorce or separation of life occurs in the elderly only 7-8%.

The study yielded data that more than half of the elderly with deprived spouses in Depok were depressed. This result is even larger 16.6% thanWulandari (2010) research in Magelang. The study also had a 43.8% greater depression rate than Henuhili (2004) study in Cibubur which ranged 25%. It also larger than the Gellis & McCracken (2008) study in Washington with the number of elderly depression ranged from 6-24%. It can be concluded that the entire elderly population of some areas identified as having mental health problems. The elderly study in Depok Village has the highest depression rate. This may be caused by the influence of internal and external stressors that then affect the level of depression elderly.

The study found that there was a significant relationship between the loss of spouses and the level of elderly depression in Depok. This result is in line with research Wulandari (2010) in Magelang which states 52% of elderly suffer depression with widow status and widower partner. Unlike the research of Marc, Raue, & Bruce (2008) in the United States which states that the prevalence of elderly depression is 15.4%. It states that the percentage of incidence of depression in Indonesia is not much different in each community. However, when compared with research from the United States, the percentage of the distribution of elderly people who experience depression is different from Indonesia. This can be caused by a single elderly culture or unfamiliar couples and middle and upper economic status that do not charge the elderly. Other factors that research in America does not involved elderly with cognitive disorder and dementia so that it minimize result of depression research at elderly (Marc, Raue & Bruce, 2008).

The results of the study in Depok also showed high incidence of depression in elderly with divorce. The data is seen from the average depression scores of elderly divorced larger than the couples died. Loss of spouses has a high enough impact even though the number does not reach the number of couples died. However, the number of elderly with divorce in Depok is still need to treat due to lead of the condition of mental disorder, because the depression rate is even higher in couples divorced. Eldery with divorce incident occurred in Depok, because they do not have close interpersonal relationship with their partner. Interpersonal relationships are closely developed when the elderly have relatively long life experiences together (Papalia & Feldman, 2012). The result of the research analysis in Depok is known to have loss spouse more than 25 years and marriage age less than 30 years. This indicates that interpersonal relationships are inadequately intertwined so that elderly couples with divorcees tend to have higher rates of depression. Especially according to secondary data Pancoran Mas (2013) is known less than half the number of elderly people using Health Community Center. This means that the stressors are exacerbated by the lack of interpersonal relationships of the environment.

Psychosocially reviewed the stage of development of elderly is in ego integrity versus despair (Tamher & Noorkasiani, 2009). The developmental task of the elderly of this stage should reach the identity of self and feeling valuable. The results showed that 31.25% of elderly in Depok Village experienced despair during their life. Based on the results of this study can be interpreted that the elderly have not been able to conclude and show the satisfaction of his life. This is due to the failure to achieve his integrity (self-acceptance) that tends to pass through the stage with despair (Meiner, 2006). Based on this, it can be concluded that depression in elderly in Depok caused by failure to go beyond psychosocial development stage. From this analysis it was concluded that the divorced elderly had an increased incidence of depression due to the lack of interpersonal factors and unfilled developmental tasks.

Elderly who loss of spouse due to die have an average depression score lower than the divorce despite the spread of more data. This is due to the liveliness of socializing, self-acceptance, and perception of death. The result of data analysis is known that the distribution of data is not normal, almost all the elderly who loss of spouse due to die in the community studied. This result is in line with the Hapsari (2011) study and describes the frequency of elderly populations with the dominant mates of death. The dominant number is because the elderly couple feel the satisfaction of marriage and tend to retain marriage until old age,

especially elderly widows (Statistics Indonesia, 2014). This indicates that more elderly achieve self acceptance with couple during his life. Other causes such as coping that is done is adaptive, environmental characteristics consisting of the elderly who on average widow or widower, and elderly involvement in environmental activities.

The result of the study revealed that the overall elderly depression range of 68.8% was due to the influence of adaptation effort and loss perception. Ross Kubbler's theory in Townsend (2014) and Stuart & Laraia (2005) suggest that the elderly with the loss of this partner are depressed due to failure to achieve acceptance. It is characterized by the elderly demonstrating withdrawal behavior, decreased social interaction, and discouragement. Individuals will also show disinterest in their daily activities such as refusing to eat, sleep disorders, and refusing to move.

The perception of the loss of a spouse relates to the time of marriage and the age of marriage. The result was reinforced by a study in Depok village that obtained data that the elderly who experienced the loss of spouses more were in the marriage age of more than 30 years. This is due to the elderly perceptions of the importance of marriage involving the physical aspects of the elderly who suffered a setback. This is require the elderly need a helping figure and accompany him. While the psychological aspects of the elderly, especially men more often remarried after splitting lives with their partners because of their psychic and emotional needs (Federal Interagency Forum on Aging Related Statistics, 2010).

The process of grieving due to loss of a partner can affect the elderly depression because of the important role of marriage for the elderly. Based on the results of the study known the average of the elderly with the loss of a dead partner interpret the importance of couples in marriage because of the presence of the couple brings admiration, the place of negotiation problems, until the important events that become aspects of individual happiness. Spouse also become approachable figures when there is an external stressor of the household, the spouse also can be a place to relax from the external problems that occur. This is in accordance with the concept of Gottman (1998) in Duncan & Goddard (2011) because these aspects have a positive impact on the elderly as an effort onto inner peace.

The incidence of depression has a physical and psychosocial impact on the elderly who may cause mortality due to a decline in the quality of life. The physical effects of depression are evident from the disruption of daily functioning. Physical complaints such as decreased appetite affect anorexia. Sleep difficulties result in fatigue and aggressive behavior (Miller, 2012). The psychosocial impact of the elderly with depression affects the elderly's motivation in the environment, low self-esteem complaints, decreased motivation for social interaction due to the elderly's evaluation of his self-concept, and helplessness. When the elderly decreases the motivation to interact it will lead to withdrawal and ends in an increased mortality rate due to suicide. If the support system family and health workers are not aware of complaints from the elderly, depression can be a new problem that leads to decreased physical ability of elderly in the move.

The results of this study have implications for nursing services. The implication for nursing service is the researchers recommend the Community Health Service to implement the GDS innovation assessment system that has been adapted to the culture of Indonesia. Based on bservations, community health nurse are enthusiastic in supporting the research results. It can help Community Health Nurse (CHN) in an effort to detect the level of elderly depression. After identified the number of elderly in each region, CHN empowers health cadres to approach elderly who loss of spouse. This is important because the cadres get knowledge that depression can occur in the surrounding environment and can be studied by observing the involvement of socialization of the elderly. In addition, cadres also received data about the level of elderly depression and together collaborate with CHN to create activities.

The implication for nursing education is CHN in Community Health Center more critical in assessing the physical complaints of the elderly who tend to cover with physical complaints. In that, CHN can deliver grieving and loss treatment and become the basis of community nurse consideration for family visits. The goal is that families use health facilities on a regular basis to check the psychological conditions of the elderly, especially in elderly with a divorce. This is because the source of stressors in the elderly are divorced more than the elderly who loss of spouse due to death. Health Caders also need to be involved to form a recreational group (self help group) in the elderly who lost their spouses.

5. CONCLUSION

The result of the study of the loss of spouses obtained data dominated by the respondents with loss of spouse due to death compared to divorced spouses. The level of elderly depression with the partner died is lower than the elderly with a divorce partner. The average score of elderly depression with partners is also lower than the couples divorce. Based on the analysis it is known that there is a significant correlation

between loss of spouse and depression in elderly in Depok. Implication of nurses in assessing, empowering cadres and improving recreational activities to the elderly with the loss of a spouse is urgently needed to improve the welfare of the elderly.

Understanding the concept of grieving and loss of spouse in elderly and training for community nurses in Depok related about the role of nurses in the stage of grieving the elderly is a need. Expected in the future along with the explosion of the elderly population, nurses and other health workers are able to initiate the mental health screening activity of the elderly by using a depression level questionnaire to detect early risk of depression. The next research can involve other depression trigger factors with the subject using qualitative methods. These trigger factors may include effects of medication, environmental, and functional weakness on the incidence of depression, the study of cause and effect of depression, as well as observation of coping patterns of elderly depression. Research can be done with interview approach because it can give reason to statement of respondent.

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