

Research Article



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Factors Related to Self-Care Among Older Persons of Makassarese Tribe, Indonesia

Abstract

PURPOSE. Self-care refer to the activities and practices performed and initiated by an individual on one's behalf in maintaining life, health and well-being. Maintenance of self-care requires use of special skills and scientific knowledge into which nursing plays a vital role in designing and implementation of the plan of care. Literatures have shown that nurses' support to existing older persons' capabilities promote active participation and responsibility for his or her own self-care. Promotion of self



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-care reduces problems resulting from reactions of older persons in unnecessary dependent roles. Community nurses of Makasar City, South Sulawesi, Indonesia in their task of providing health service of older persons have limited data on characteristics of older persons seeking care, and the common symptom experiences of older persons. Knowledge of the interplay of these factors are important to provide better health services. The objective of the research is to determine the relationship between predisposing factors known as basic conditioning factors (age, gender, marital status, educational level, occupation, living arrangement and common symptoms experience) and the experiences (knowledge, attitude, practice) on self-care of older persons.

METHOD. A descriptive correlational research design was used. The sample consisted of 98 Makassarese older persons who live in Paropo Village, Makassar, South Sulawesi, Indonesia. Survey questionnaire was used for the profile of the respondents and the knowledge, attitude and practice (KAP) on self- care. There were seven (7) who participated in the focus group discussion (FGD). Data was analyzed using descriptive statistics. The relationship between basic conditioning factors and KAP on self-care of older persons was determined. Appropriate processes for ethical consideration was done.

RESULTS. The results of the study showed that the mean age of Makassarese older persons is 71 years, more females, mostly married, widow, not completed elementary school, not working, and living with their children. The common symptom experiences were: joint pains, low back pain; vision problem, myalgia. As to KAP on self-care, Makassarese older persons have fair knowledge, positive attitude, and low level of

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practice on self-care. There is significant relationship between knowledge on self-care and education, attitude on self-care and common symptom experiences, practice on self-care and age, gender and education. FGD on practice of self-care showed the following. To stay healthy because of chronic ilness, such as, diabetes and hypertension and to deal with other health problems(e.g. toothache, diarrhea), they resorted to selfremedies and prayer, consuming soft diet, reducing salty and sweet food. Nurses were perceived as important in giving information on health care.

CONCLUSION. Knowledge of the interplay of basic conditioning factors and self-care practices among older persons guide nurses on better and effective nursing care towards self-care. Support in terms of education on self-care for older persons have to consider the basic conditioning factors, and the common symptom experiences of older person to help reduce dependency for their health needs.

BACKGROUND

aintenance of self-care requires use of special skills and scientific knowledge into which nursing plays a vital role in designing and implementation of the plan of care. Literatures have shown that nurses' support to existing older persons' capabilities promote active participation and responsibility for his or her own selfcare. Promotion of self -care reduces problems resulting from reactions of older persons in unnecessary dependent roles. This study uses Orem's self-care theory on the concept of self-care agency. Self-care agency is referred to as the acquired ability to meet ones' continuing requirements of care. The concept of self-care agency proposes the important role of the nurse to help clients meet their health needs. However, there are basic conditioning factors that would lend support to the understanding of self-care agency in the care of older persons. Limitations in performing self-care exist when the experiences in terms of knowledge, attitude or skills required for a given self-care action maybe inadequate or nonexistent. Orem (2001) identified basic conditioning factors that may influence or modify self-care agency. In this study, these factors include age, gender, marital status, educational level, occupation, living arrangement and common symptoms experience. These factors may affect the experiences (knowledge, attitude, practice) on self-care of older person.

There is a dearth of literature, especially in Indonesia, with regard to the relationship of conditioning factors to knowledge, attitude and practice (KAP) of older persons in terms of self-care. Thus, this study aimed to determine the relationship between the basic conditioning factors (BCF) and knowledge, attitude, and practices (KAP) on self-care.

METHOD

Research Design and Variables

A descriptive correlational research design was used in the study. The aim is to describe relationships among variables, rather than to infer cause and effect relationship. The independent variables are age, gender, marital status, educational level, occupation, living arrangement and number of common symptoms experience. The dependent variables are knowledge, attitude and practice on self-care.

Research Setting, Population and Sample

The study was conducted in Paropo village, Makassar, South Sulawesi, Indonesia. Paropo village is located ten kilometers from the western part of Makassar city. Makassar is the capital city of South Sulawesi, Indonesia in which 95% of the population belongs to Makassarese tribe.

The sample consisted of 98 older persons, who live in Paropo Village. Based on the data from Batua Public Health Center, there were 128 older persons who live in the village in 2010. Using purposive sampling, the subjects were men and women of the Makassarese tribe, 60 years old and above, have good hearing, sight, and mental condition, can communicate in Bahasa, and can perform activities of daily living.

Data Gathering

The survey questionnaire used had two components: profile of respondents and KAP on self-care. Profile of the respondents includes the following: age, gender, marital status, leve of education, occupation and living arrangement. The researcher developed the questionnaire on KAP based on the component of Orem's theory as well as the result of researcher's observation in the research setting. The instrument was translated into



Bahasa and reviewed its content and language by the Indonesian researchers who conduct studies on self-care topic. The Cronbach's alpha coefficients were 0.93 for knowledge, 0.90 for attitude and 0.93 for practice on selfcare instrument.

Data Analysis

Descriptive statistics was used to summarize the socio demographic data, and the Chi square and Fisher's exact test were used to establish relationships between variables.

RESULTS

Makassarese older persons belong to the young old (mean age: 71.12; SD 8.49) with more females compared to males, mostly married, had not completed elementary education, not working, and who live with their children. As shown in Table 1, the most common health symptoms were joints pain and around one-fourth of the respondents suffered from five health symptoms in the last 6 months.

 Table 1. Distribution of Respondents according to Socio Demographic

 Variables of Makassarese Older Persons (n=98)

Variable	f	%		
Age				
60-74	63	64.3		
75-84	24	24.5		
≥ 85	11	11.2		
(Mean ± SD)	(71.12 ± 8.4			
Gender	10.000			
Male	32	32.7		
Female	66	67.3		
Marital Status				
Single	6	6.1		
Married	51	52		
Widow/er	41	41.8		
Educational Level				
Not completed elementary school	74	75.5		
Elementary school or higher	24	24.5		
Occupation				
Not working	81	82.7		
Working	17	17.3		
Living Arrangement				
Spouse	19	19.4		
Children	67	68.4		
Relatives	11	11.2		
Alone	1	1		

Table 2 shows that there is no significant relationship between knowledge on self-care and the following variables: age (p= 0.68), gender (p= 0.47), marital status (p=0.43), occupation (p=0.29), living arrangement (p= 0.11), and number of common symptoms experience (p= 0.48). However, there is a significant relationship between knowledge on self-care and education (p= 0.01).

Table 2. Distribution of Respondents according to CommonSymptoms Experience and Number of Common SymptomsExperience within the Last Six Months (n=98)

Variable	f	%	
Common symptoms experience in the last 6 months		•	
Joint Pain	67	68.4	
Low Back Pain	62	63.3	
Vision problem	54	55.1	
Myalgia	53	54.1	
Number of common symptoms experience in the last 6 months			
0-1 symptoms	16	16.3	
2-6 symptoms	77	78.6	
7 symptoms	5	5.1	

As shown in Table3 (page 27), there is no significant relationship between attitude on self-care and the following variables : age (p= 0.65), gender (p=0.32), marital status (p= 0.82), occupation (p= 0.20), and living arrangement (p= 0.86). The only significant relationship is between knowledge on self-care and number of common symptoms experience (p= 0.00).

There is no significant relationship between practice on self-care and the following variables: marital status (p= 0.11), occupation (p= 0.24), living arrangement (p=0.61), and number of common symptoms experience (p= 0.74). However, there is a significant relationship practice on self-care and the following variables: age (p= 0.01), gender (p= 0.00) and educational level (p= 0.00). (Table 3)



As shown in Table 3, no significant relationship between attitude on self-care and the following variables: marital status, occupation, living arrangement and number of common symptoms experience.

DISCUSSION

The finding of this study that knowledge on self-care had significant relationship with education were also found in several studies. Badzek, Hines and Moss (1998)

Variables	Knowledge		p		Attitude		p	Practice			p	
			Total		Negative f (%)	Positive f (%)	Total f (%)		Low f (%)	High f (%)	Total f (%)	
			f (%)									
Age												
50-74	11 (17.5)	52 (82.5)	63 (100)	0.681	4 (6.3)	59 (93.7)	63 (100)	0.652	28 (44.4)	35 (55.6)	63 (100)	0.011
75-90	5 (14.3)	30 (85.7)	35 (100)		1 (2.9)	34 (97,1)	35 (100)		25 (71.4)	10 (28.6)	35 (100)	
Gender												
Male	4 (12.5)	28 (87.5)	32 (100)	0.471	3 (9.4)	29 (90.6)	32 (100)	0.329	10 (31.2)	22 (68.8)	32 (100)	0.00'
Female	12 (21.2)	54 (78.8)	66 (100)		2 (3.0)	64 (97.0)	66 (100)		43 (65.2)	23 (34.8)	66 (100)	
Marital Status	-	12	÷									-
Married	10 (19.6)	41 (80.4)	51 (100)	0.43	3 (5.9)	48 (94.1)	51 (100)	0.821	24 (47.1)	27 (52.9)	51 (100)	0.111
Single	0 (0)	6 (100)	6 (100)		0 (0)	6 (100.0)	6 (100)		2 (33.3)	4 (66.7)	÷ (100)	
Widowler	6 (14.6)	35 (85.4)	41 (100)		2 (4.9)	39 (95.1)	41 (100)		27 (65.9)	14 (34.1)	41 (100)	
Educational Level												
Uneducated	16 (21.6)	58 (78.4)	74 (100)	0.011	4 (5.4)	70 (94.6)	74 (100)	1.02	47 (63.5)	27 (38.5)	74 (100)	0.001
Elementary school or higher	0 (0)	24 (100)	24 (100)		1 (4.2)	23 (95.8)	24 (100)		6 (25.0)	18 (75.0)	24 (100)	
Occupation					÷					()		
Not working	15 (18.5)	66 (81.5)	81 (100)	0.29	3 (3.7)	78 (96.3)	81 (100)	0.202	46 (56.8)	35 (43.2)	81 (100)	0.241
Working	1 (5.9)	16 (94.1)	17 (100)		2(11.8)	15 (88.2)	17 (100)		7 (41.2)	10 (58.8)	17 (100)	
Living Arrangement		1					1					
Spouse	1 (5.3)	18 (94.7)	19 (100)	0.11	1 (5.3)	18 (94.7)	19 (100)	0.861	12 (63.2)	7 (36.8)	19 (100)	0.611
Children	15 (22.4)	52 (77.6)	67 (100)		4 (6.0)	63 (94.0)	67 (100)		34 (50.7)	33 (49.3)	87 (100)	
Relatives	0 (0)	11 (100)	11 (100)		0 (0)	11 (100)	11 (100)		6 (54.5)	5 (45.5)	11 (190)	
Alone	0 (0)	1 (100)	1 (100)		0 (0)	1 (100)	1 (100)		1 (100)	0 (0)	t (100)	
Number of common sy	mptoms expe	rience in the la	est 6 months	-				1				
0-1 symptom	1(8.2)	15 (93.8)	16 (100)	0.48*	2(125)	14 (87.5)	16 (100)	0.001	8 (50.0)	8 (50.0)	15 (100)	0.741
2-5 symptoms	14 (18.2)	63 (81.8)	77 (100)		3 (3.9)	74 (96.1)	77 (100)		43 (55.8)	34 (44.2	77 (100)	
7 symptoms	1 (20)	4 (80.0)	5 (100)		0 (0)	5 (100)	5 (100)		2 (40.0)	3 (60.0)	5 (100)	

probability using Pearson chi-square test

Probability using fisher exact test





found that education influence self-care knowledge among elderly hemodialysis patients.

Some variables did not have significant relationship to knowledge on self-care. Badzek, Hines and Moss (1998) also revealed that there was no significant relationship among self-care knowledge and gender in elderly hemodialysis patients. Kart and Engler (1994) found that the importance of marital status diminished in the presence of more detailed measures of social support. Futher, in a meta-analysis study on self-care in Thailand by Klainin and Ounnapiruk (2010) concluded that age and gender had weak relationship on self-care.

The significant relationship between attitude on selfcare and number of symptoms experience was also found in Callaghan study (2006). He reported that medical problem or disability had significant relationship to selfcare in adolescents.

Several variables did not have any relationship to attitude on self-care. Living arrangement variables is only associated with lower level of life satisfaction (Borg, Hallberg & Blomqvist, 2005). Futher, marital status is associated with functional ability & higher level of life satisfaction, but not in self-care (Mroczek & Spiro, 2005). Horsburgh (1999) even found that marital status did not influence self-care in Canadian adults with end-stage renal diseases. Klainin and Ounnapiruk also argued that several existing studies on self-care are unpublished. As a result, supporting studies showed the non significant relationship between sociodemographic variables and self-care is limited. They also added that except for health status, all basic conditioning factors (BCF) variables showed weak relationships.

In this study, three variables were found to have significant relationship to practice on self-care. The variables on conditioning factors (age, gender, education) may influence or modify self-care agency and physical functioning. It is consistent with Orem's theory (2001) and Zimmer et al (2003) . In Zimmer study, respondents who were older, female and had low education, were more likely to have higher functioning difficulty scores.

Significant relationship between practice on self-care and age was also found in some studies. The result is congruent with a study done on self-care and well being model for elderly women by Wang, Shieh and Wang (2004) where there was association between age and self-care practice of older persons in Taiwan. Added by Soderhamn, Lindencrona, & Ek (2000) who found that the ability to do self-care was declined after people reached age 75 because of genetic and constitutional factors, culture, life experiences and health status. While according to Aldridge, self-care practices is more challenging and problematic in older persons because of the multiplicity and chronicity of other diseases (as cited in Washington, 2009).

Molarius and Janson study (2002), descibed that older women have poorer health than man. It is reflected that women may need extra attention from health care professionals. Another study by Bai, Chiu and Chang (2009) revealed that male older persons with diabetes in Southern Taiwan had significantly higher self-care behaviour scores than females. Another two studies reported that women receive more help from others (Norburn et al, 1995, Kart & Engler, 1994). It is suggested that women may need extra attention from health-care professionals and in nursing care (Tannenbaum & Mayo, 2003; Molarious & Janson, 2002; Bai et al, 2009).

In Bai et al study (2009), there were also significant differences in the self-care behaviour scores due to educational level. The older persons who had educational level of senior high school and above had higher self-care behaviour scores than those with only elementary school educations. It is indicated by the higher awareness of diabetes among those who had high level of education compared to them with low level of education. Leenerts et al (2002) added that education is the channel for promoting self-care practice through self-care ability. In addition, Notoadmodjo (2010) suggested that social factor such as age and education will give impact to individual behavior.

This study showed there is significant association between education and practice of self –care as reflected in the higher percentage of respondents with low educational background. There seems to be a tendency to purchase over –the-counter drugs as the first action to solve health problems. Older persons with low educational background may not know the dangerous and side effects of consuming drugs without prescription.



Kreager & Butterfly (2007) found that family networks is a key source of support in Indonesia, but this study did not examine whether family had been a good support for health care practice or not. Furthermore, Klainin and Ounnapiruk (2010) set a series of requirements of what to be called as good relationshipswithin family. They said that family relationships indicated the degree to which family members performed the following activities together: spending leisure time together watching TV and listening to music, taking trips, consulting each other before doing activities, asking advise from older persons, problemsolving together, taking good care of older persons, and expressing affection and concern one to another.

Zimmer et al (2003) showed that socioeconomic status indicators are linked to physical functioning of older adults. These findings were conducted from studies in Asian societies.

In summary, three variables were found to have significant relationship to practice on self-care. These included the variables on conditioning factors (age, gender, education).

Complaints on joints pains were the most common among the health symptoms. This may have influence on the limitations in physical functioning.

Overall, the Makasarese older persons had fair knowledge, positive attitude, but low practice on selfcare. The study showed a relationship between practice of self-care and age, gender and education. Concerns for self care were identified through the focus group discussion. These were on the areas of health complaints, efforts done to meet their health problems, efforts to stay healthy, nursing needs, and sources to learn self-care. Participants of the study recognized the importance of support system, to include family and the community.

CONCLUSION

Knowledge of the interplay of basic conditioning factors and self-care practices among older persons guide nurses on better and effective nursing care towards self-care. Support in terms of education on selfcare for older persons have to consider the basic conditioning factors, and the common symptom experiences of older person to help reduce dependency for their health needs.

RECOMMENDATIONS

The recommendations include improving access to health care facilities, further study on reasons why older persons do not prefer health care facilities, and interventions to improve self-care practices of older persons.

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