



The Effect of Care Plan Application Based on Roy's Adaptation Model on The Spiritual Well-Being of Elderly People in Urmia Nursing Homes

Esmail Maghsoodi¹, Masoomeh Hemmati Maslak Pak^{2*} and Omid Naseri³

¹M.Sc in Nursing Education, Faculty of Boukan Nursing, Urmia University of Medical Sciences, Iran

²Associate Professor, Nursing Department, Urmia University of Medical Sciences and Health Services, Iran

³M.Sc in Nursing, Kurdistan University of Medical Sciences and Health Services, Iran

*Corresponding Email: Hemmatma@yahoo.com

ABSTRACT

with the growing elderly population and the incidence of complications and problems associated with this period, the need to make a positive adaptation during this important period of life, is considerable. In this regard, this is possible to use the nursing theory and particular, Roy's adaptation model to creation work positive with make the incompatible and unhealthy behaviors to compatible and healthy behaviors and also improve their SWB as one if the overall health. The present study was determine the effects of the health careplan based on Roy's adaptation model on the Spiritual Well-Being of elderly people In Urmia nursing homes, have been done. In this study, 60persons of elderly, which had conditions related to this study, had been selected and randomly divided into control group (30 persons) and intervention group (30 persons), were selected. Tools for Collecting data was SWB questionnaire, which was completed in post and pre – test. The care plan was designed according to conclusions from investigation and knowing Roy's adaptation model and applicated in intervention group, in 2 sessions teaching for elderly and 4 individual sessions , in order to manipulate focal stimulants in during 1.5 month and a month later was followed. The analysis of data were done by SPSS software and by using the descriptive and inferential statistics. The results indicate that overall mean scores below the scale dual SWB and average of SWB, after a study of 2 groups is statistically significant ($P < 0.001$). Also the average of scores in elderly SWB in the intervention group after care plan, was increased which, according to T-test, this increase is significant ($P < 0.001$). Caring plan which based on self concept mode of Roy's adaptation model, have positive influence in promoting the SWB of the elderly. Therefor, it's suggested, health caring providers and nurses by strengthen the adaptation in the elderly based on the theories of nursing and caring plan, increase adaptation and healthy behaviors as a critical component in promoting the SWB of the elderly.

Keywords: Roy's adaptation model, self-concept, Spiritual Well-Bieng, elderly, nursing homes.

INTRODUCTION

According to World Health Organization's definition, elderly is senescent is a person who is over 60years old and elderly is divided to 3 categories: The young aged, middle- aged and old aged[1]. In general, elderly is a phenomenon, which caused by changes in biology, physiology, biochemistry, and anatomy of the body is created. These changes, in during the time, affect the performance of the cells[2]. Increase of human knowledge in various fields, especially in the field of medical sciences, create a change in a significant in the elderly population, the pyramid of the World's population statistics as well as Iran [3]. According WHO¹ statistics, the increase in the elderly population in the world, annual is 2.5percent [4]. Statistics show that the number of elderly in the Iran, formation of a population of over %8.2 which is rising and it is estimated will be to 10.2 percent[5].

With the increase in the elderly population, age related complications will be more [6]. Due to an increase in side the form of physical and mental health, families tend these values in nursing homes, is increasing [7]. The elderly who live in nursing home, with a view to exclusion of their family and their children are suffering from despite and the signs of depression, such as isolation, lack of participation in peer groups, thinking paranoid and health problems will also increase [7,8]. Given this set of physical and mental problems, primarily the health of elderly who really valuable, will be threatened [9]. According to WHO's definition, the health includes physical, psychological, social and spiritual [10]. Spiritual dimension as one of dimensions of health is the focus of many experts [11].

SWBⁱⁱ including 2 dimensions: the vertical and horizontal dimensions. The vertical dimension is included with numinous and horizontal dimension is included with other and environment. This is a believe, without SWB, other environmental psychic and society dimension will not have acceptable operation and subsequently quality of life will be not accessible [11,12]. Stuckey et al, in their study was shown, which general health in person, have a direct relation with spirituality [13]. Spirituality is necessary for everybody and experts believe that strengthening these requirements will make, calm, energy and health in elderly [14]. However experts believe, elderly who are live in nursing homes according to their environment and conditions and elderly complication in the horizontal dimension will have disorder and also have feelings of worthlessness and hopelessness [15]. Therefore, with a positive reinforcement and significant strengthening of the positive features of the elderly and promotion the discussion and group activity, which will increase strengthen a sense of hope and also spiritual [16].

For creating a positive Attitude in elderly, should be concentration on reinforcement of spirituality and believes to change their life style and make the hope [17]. Increase health behaviors make the change of the elderly lifestyle and this style support active elderly which increase quality of life with quantity [18]. Researches findings have shown a significant statistic relation between aging psyche health and spirituality [12,14]. By create a positive and affective adaptation in aging maybe SWB was increase and ideal SWB increase the health and decrease the complications effects of aging and increase the quality of elderly life [12, 19].

The nursing researchers, have been offered different theories and Roy's adaptation model, is one of the affective and usage models in nursing, in the adaptation domain [20,21]. According to this model, person to achieve adaptation, should be achieve to adaptation of physiologic dimension and psychology dimension [21,23]. According to this model, aggregate of 3 stimulants such as: focal, contextual and residual will have affect on adaptation and manipulate these stimulants in during the caring program will increase the adaptation [21,24]. According to this model, a person can be assessed in 4 dimensions such as : physiologic, self-concept, role function and interdependence and according to obtained information which determined unknowing reasons in client and according that made an accurate plan to create an adaptation and health behavior in client [25,26]. Significant part of mental and emotional health related to the new feelings about self. Miss Roy believes self-concept is a feeling which person has about self [23]. Self-concept in reality is what people make their mind [27]. Conception about yourself most of the time, depend to their experience and whatever, other think about them and also feedback from operation of others. Most of the time, guys don't have a clear view about themselves, ability, talents, and even about their physiological [28]. Recognition and have a real conception about yourself is very important, the conception which everybody have about themselves, have effect on behavior and operation and most of the important decisions made on this self-concept [29]. In general people think that they act the same way. If they have wrong thoughts, they can't make accurate decisions, in fact self-concept have effect on their feelings and this feeling have direct relation with confidence and more satisfaction and given more successfulness. These people have self-confidence and make decision accordingly to their abilities [21].

Unfortunately most of the elderly to different reason including success and failures or their disappointed, don't have an ideal self-concept and sometimes, persons are capable to concept other opinion and do the problem between whatever they are and what they think to be [2,30]. Therefore with recognition disagreeable behavior and also stimulants to this behavior in the self-concept of elderly, this is possible to create a standard care model according to the adaptation model and do that [31]. So according to the said point, this study did to determine the effects of the health care plan based on self-concept mode of Roy's adaptation model on the Spiritual Well-Being of elderly people In Urmia nursing homes.

MATERIALS AND METHODS

This research is a pre and post-test experimental. All of the elders which were in the nursing homes such as: ALZAHRA, KHANEYESABZ, ARA, and FERDOS, which had the inclusion criteria, such as :Over 60years old, without listening and speaking problems, awareness of place and time, object and person without any mental diseases, without any experience of psychotherapy and without experience of sorrow in 6 month ago, without any therapy which make disorder in memory and thought, without any physiological diseases such as: Thyroid, which they were without any cognitive disorder, they were available participated in the study, they were 60 persons. After take written satisfaction from elderly, they were by the randomly software divided in 2 groups, intervention[30] and control [30].

Questionnaire of demographics and SWB was completed by interview with participants. Questionnaire of SWB is a valid and reliable questionnaire and including 20 questions which their answers are include 6 parts. This scale has 2 subscale which are religious health and body health which every of them have 10phrase max and min are 10 and 6.Odd Phrases show the religious health and even phrases show body health. Total score including sum of 2 dimensions which is between 20 until 120.validity and reliability of this questionnaire by has been determined by Abbasi et al via content validity and Cronbach's alpha[32].

For designing of the care plan for intervention groups, in every centers, Roy's adaptation model assessment forms issued for all of elder in intervention groups. Then for every participants in itervention group according to completed forms, maladaptive behaviors and focal, contextual and residual stimulants of theirs was determined. After this process, intervention level is paid.

6 sessions of research intervention including 2 sessions for general teaching to elders, which was about self-concept.In self-concept teaching was to create positive change in body-image, self-ideal and also, other important factors. In other sessions which including 4 sessions for all elders in intervention group, which in during these sessions, focal, contextual and residual stimulants of maladaptive behaviors were found from Roy's form, were manipulated, the researchers with Professor of psychology consultant, were in the centers and according to, emphasize on spirituality and encourage for doing pray, consultation is given, and offered recommendation for modification of in maladaptive behaviors of self-concept were used.

After the end of the sessions related to education and intervention, researcher for1 month, pursue care plan' application process by elder via the presence and supervision in the centers. After the time specified, researchers again complete SWB questionnaire for all of aging. Collected data were analyzed via SPSS statistic software and statistical descriptive tests.

RESULTS

One of the elder in intervention group was died and get out from this study. So, number of samples in intervention group was 29. The findings showed that the most of elders in control group(%93)and in intervention group(%96) are females, average of age in persons who were participants in this research in control group was 70.10 ± 4.59 and in intervention group was 69.58 ± 7.03 . The results matching independent t-test and χ_2 showed which in both of groups, don't have significant different in age, period of inhabitancy, child, gender, education marital status, income and insurance variables (table1).

Table 1 -Comparing the demographic characteristics of the two groups

Variable		control group		intervention group		independent t-test results
		mean	SD	mean	SD	
Age		70.1	4.95	58.69	03.7	P= 778.0
duration of residence		5.5	35.2	79.5	11.2	P= 617.0
number of children		3.83	53.1	62.3	98.1	P= 647.0
Variable		n.	%	n.	%	chi-square results
Gender	Female	28	93.34	28	96.55	X ² = 0/316 d.f= 1 P= 574.0
	Male	2	6.66	1	3.45	
marital status*	Married	6	20	8	27.59	X ² =651.3 d.f= 1 P=302.0
	Single	0	0	2	6.9	
	Divorced	1	3.34	0	0	
	spouse died	23	76.66	19	65.5	
Centers	Khane-e Sabz	16	53.34	16	55.16	X ² = 126.0 d.f= 3 P= 989.0
	Alzahra	7	23.34	7	24.16	
	Ferdows	4	13.32	3	10.34	
	Ara	3	10	3	10.34	
Education	Illiterate	18	60	19	65.5	X ² = 269.0 d.f= 2 P= 874.0
	under diploma	9	30	8	27.6	
	diploma and more	3	10	2	6.9	
income source	Relief Committee and people	5	16.6	6	20.6	X ² =319.3 d.f= 4 P= 418.0
	Family	8	26.7	8	27.6	
	himself/herself	17	56.7	15	51.8	
Insurance	Has	26	86.7	23	79.3	X ² = 576.0 d.f= 1 P= 451.0
	does not have	4	13.3	6	20.7	

* To conduct the chi-square test for this variable, the four subgroups were combined and compared in married and single subgroups.

According to these findings the average of score in subscale of religious health and body health and also average of score in SWB in both of them , the significant different was not shown(P< 0.005) (table 2).

Table 2

Time subscale	Before the intervention		p-value	After the intervention		p-value
	Control group	Intervention group		Control group	Intervention group	
Religious health	52.16± 7.84	52.32 ± 7.68	P= 0.869	52.31 ± 7.69	56.33 ± 3.76	P< 0.005
Physical health	40.11 ± 10.39	40.31 ± 9.97	P= 0.784	40.37 ± 9.93	49.30 ± 7.75	P< 0.001
Sipritual health	92.27 ± 14.24	92.63 ± 14.88	P= 0.873	92.68 ± 14.53	105.33 ± 14.67	P< 0.001

The findings of this research showed, the average of scale in religious health in the control group, before care plan based on Roy's adaptation model was 92.97 with standard deviation, which was 14.24, which after intervention was increase to 92.68 with standard deviation to 14.53.The findings of paired t-test shows not significant different of SWB in control group, between after and before intervention (P=0.248).In intervention group, average of score in SWB before intervention was 92.03 with standard deviation 14.88, which after intervention increase to 105.33 with standard deviation 14.67.The findings of paired t-test shows a significant increase (P<0.001), (table3).

Table 3- Comparing the mean scores of Spiritual well-being in the two groups before and after the care plan based on Roy's adaptation model

Sipritual well-being	Before the intervention	After the intervention	the difference between before and after the intervention	Paired samples t-test result
	Mean and SD	Mean and SD		
Control group	92.27 ± 14.24	92.68 ± 14.53	0.41 ± 3.31	P = 0.248
Intervention group	92.63 ± 14.88	105.33 ± 16.67	12.70 ± 3.25	P < 0.001

DISCUSSION

According to independent t-test and χ_2 in this study between control and intervention groups variables such as: age, residence time, number of children, gender, education, employment status and insurance, There was nostatistically significant difference. therefore a statistical different in dependent variable in intervention group after doing intervention have been caused by positive effect of care plan based on Roy's adaptation model. The findings of current research showed that, care plan based on Roy's adaptation model, have positive effect on both, religious

health and body health. This is believes, which having behavioral health and adaptation in self-concept have a significant effect on body, mental and social dimension[17,33].If SWB is copromised, there is the potential for mental disorder including depression and also having disappointment[12]. Nowadays, throw down elders by their families makes disorders like depression, social disorders, solitude, which maybe with improvement of spirituality in elder via adaptation. This disorder is decreasing and surly achieving to this object, need a specific care plan[17,33]. As mentioned above the lack of social and family support, increased mental health problems and social and physical problems and disease [34].

Koeing et al, showed that which spiritual and religious plays an important role in improving the health of the elder [35].Elders who have high spiritual force and faith are stronger compared to the weaker elder, have more adaptation power and more capability with physical and physiological problems [15,35].From what is obviously, important issue, is calm hopeful, mental health and after that, the high quality of life for elder that despite with SWB will be obtainable[36].Experts believe that improving of self-concept which ability and confidence is main issue of that give mental calm to elder. Also this is possible with positive adjustment, satisfaction, the change of person's view about life, SWB and also solve, body and psychological problems help to aging [16,19,37].

In verification of The result of this study ,Mui (2008) in their research showed strengthening spiritual and body, religion health and in general SWB, in American –Korean aging is a significant statistical relationship [38].Mueller et al (2001) in their study, which aims to determine the effect of psychological counseling in medical and clinical interventions with spirituality were done to this result noted that after psychological counseling, patients achieve to the optimal SWB and also to the average of high scores in religious health and body health. It should be said, average of body health scores have not significantly increased, but the increase in subscale scores of religious health was statistically significant [39].

The findings of this research observe a positive effect from care plan based on Roy's adaptation model on elderly SWB.Also, as the result of Roger's (2012)study to evaluate effects of Roy's adaptation on promote elderly physical activity, showed that physical activity carried out on the basis of practical exercises such as: Yoga, in accordance with Roy's adaptation model takes to positive model in body in elder such as: Improving of physiological conditions and self-concept, independent and hopeful and also takes to improving of spirituality [40].Also Wachholtz and et al (2005)in their study to examine the effect of 2 methods of comparative therapeutic counseling with approach of spirituality and physical factors in cardiac patients and medical advice to the conclusion that with the approach of spirituality, spiritual and physical aspects of both have a positive impact on physical impact, but both methods has been at a level[41].

CONCLUSION

As regards the implementation of the care plan based on nursing theory of in corporation can make positive and psychology dimension of care recipient according to the result of this research, usage of care plan based on Roy's adaptation model in improving SWB is effective. So it as the positive effects of this model in adaptation and better control the living conditions of the elderly benefited.

Therefor usage of Roy's adaptation model to care plan designing and also encourage health care providers and nurses to strengthen adaptation in the elder based on the theory of nursing and care planning and also, increase the ability sense, reliance and independent in elderly. Limitation of this study include being more illiterate participants had pointed out, that to overcome this issue, the researcher complete questionnaires through the completed interviews.

Acknowledgments

This paper was retrieved from M.Sc. in nursing thesis; therefore, special thanks go to the honored Research Department, Urmia University of Medical Sciences, who funded this study. Special thanks also go to all of the elderly and the authorities of the nursing homes on Urmia who helped us a lot.

REFERENCES

- [1] Farrell J. Nursing care of the older person: J.B. Lippincott; 2006: 53-88.
- [2] Eliopoulos C. Gerontological nursing. 6nd ed. Philadelphia: Lippincott Williams & Wilkins; 2005:15-65.

- [3] Fried T, Doorn C, O'Leary J, Tinetti M, Drickamer M. Older person's preferences for home vs hospital care in the treatment of acute illness. *Arch Intern Med.* 2000;160(10):1501-6.
- [4] United Nations, Department of Economic and Social Affairs, Population Division (2013). *World Population Ageing 2013.* ST/ESA/SER.A/348.
- [5] Taheri P. Aging population report (In PERSIAN). Tehran: Ministry of Health and Medical Education, 2013.
- [6] Darvishpour-Kakhaki A, Abedsaieedi Z, Delavar A, Sa'iedalzakerin M. Instruments for measuring health status and quality of life for seniors. *Research in medical journal.* 2009;33(3):162-73. (In Persian).
- [7] Hesamzadeh A, Saied-madah S-B, Mohammadi-shahbolaghi F, Rahgozar M. Quality of life of elderly nursing home residents, families, nursing home residents with private and public in Tehran. *Iranian Journal of elderly.* 2009;4(14):66-74. (In Persian).
- [8] Ghasemi H, Harirchi M, Rahgozar M, Akbarian M. Comparing the quality of life of elderly nursing home residents and their families in Isfahan. *Quarterly Journal of Social Welfare.* 2010;10(39):177-200. (In Persian)
- [9] Panaghi L, Abarashi Z, Mansouri N, Dehghani M. Quality of life and demographic characteristics associated with the elderly people in Tehran. *Iranian Journal of elderly.* 2009;4(12):77-87. (In Persian).
- [10] Marlene A, Michelle R. *Biological and Social Theories of Aging. Concept of aging.* New York: Padilla; 2010. p. 19-27.
- [11] Dzuka J, Dalbert C. Well-being as a psychological indicator of health in old age: A research agenda. *Studia Psychologica.* 2000;42:61-70.
- [12] Jadidi A, Farahaninia M, Janmohammadi S, Haghani H. The Relationship between Spiritual Well-Being and Quality of Life among Elderly People Residing in Kahrizak Senior House. *IJN.* 2011;24(72):48-56.
- [13] Stuckey JC. Blessed assurance: The role of religion and spirituality in Alzheimer's disease caregiving and other significant life events. *J Aging Stud.* 2001;15(1):69-84.
- [14] Monika A. Effects of Religion and Purpose in Life on Elders' Subjective Well-Being and Attitudes Toward Death. *Journal of Religious Gerontology.* 2003;14(4):55-77.
- [15] Khalili F, Sum S, Asayesh H. The spiritual well-being status in Isfahan city elderly. *Iran Elderly Journal.* 2013;8(28):16-23.
- [16] Fehring R, J., Miller J F, Shaw C. Spiritual wellbeing, religiosity, hope, depression, and other mood states in elderly people coping with cancer. *Oncology Nursing Forum.* 1997;24:663-71.
- [17] Bishop AJ. *Interpersonal and spiritual resources in late-life adaptation and well-being: a study of elderly men and women religious residing within monastic religious communities [PhD Thesis].* Ames: Iowa State University; 2005.
- [18] Mirsa'eedi Z-s, Eftekh-ardebili H, Nori-jeliyani K. Effect of a self care program on quality of life of the elderly clients covered by health centers of Southern of Tehran. *Scientific Journal of School of Public Health and Institute of Public Health Research.* 2013;10(4):17-32. (In Persian)
- [19] Maghsoodi E, Hemmati Maslak Pak M, Zareei F, PourRashid S, Sofiyani A, Shahidi L. The Effect of Care Plan Application Based On Roy Adaptation Model on the Self-Efficacy in Elderly People in Urmia Nursing Homes. *Research Journal of Pharmaceutical, Biological and Chemical Sciences.* 2015;6(1):793-9.
- [20] Chiou CP. A meta-analysis of the interrelationship between the modes in Roy's adaptation model. *Nursing Science Quarterly.* 2001;13(3):252-8.
- [21] Gholamzadeh S, Hazrati M. *The Application of Adaptation model on patient care (IN PERSIAN).* 1th ed. 5th, editor. Tehran 2005. 144 p.
- [22] Fiona R. *Roy's Adaptation Model of Nursing.* Learning Disability Nursing. Birmingham 2010. p. 16.
- [23] Roy C. *The Roy Adaptation Model.* Upper Saddle River: Pearson; 2009. 11-81.
- [24] Elizabeth LD. *Community Health Nursing Practice and the Roy Adaptation Model.* *Public Health Nursing.* 1999;16(4):290-300.
- [25] M. S-K. Theory-guided intervention for preventing diabetes-related amputations in African Americans. *Journal of Vascular Nursing.* 2004;22:126-33.
- [26] Morgan PD, Gaston-Johansson F, Mock V. Spiritual Well-Being, Religious Coping, and the Quality of Life of African American breast cancer treatment: a pilot study. *ABNF Journal.* 2006;17(2):73-7.
- [27] Ahrari S, Heydari A, Vaghee S. The role of self-concept mode of Roy's Adaptation Model on Adherence of diet regimen in Heart Failure Patients. *Ofooghe-danesh; Journal of Gonbad University of medical sciences* 2012;18(1):18-24. (In Persian).
- [28] Tatiana FdC, Kamila NSL, Smalyanna SdCA, Sérgio RdS, Kátia Neyla dFMC, Kaisy PM. Self-Concept Analysis Of Elderly In Light Of The Model of adaptation of Roy: the 'I Physical and The I personal' *J Nurs UFPE* on line. 2013;7(5):1421-6.

- [29] Robins RW, Trzesniewski KH, Tracy JL. Global self-esteem across the life span. *J Psychology Aging*. 2002;17(3):423-34.
- [30] Kang S-k. Effects of Social Activities and Religion/Spirituality on Well-Being in Life among the Korean Elderly. Korea: Sogang University ;2011 .p. 13-33.
- [31] Hay CG. Predictors of quality of life of elderly end-stage renal disease patients: an application of Roy's model. Georgia State: Georgia State University; 2005. 20-82.
- [32] Abbasi M. Nursing Student's Spiritual Well-Being, Spirituality and Spiritual care Perspectives [MsN Thesis]. Tehran: Medical university of Tehran; 2006.
- [33] Maghsoodi E, Hemmati. Maslakpak M, Sheikhi S, Khalkhali HR. The effect of care plan application based on Roy Adaptation Model on the self-esteem in elderly people in Urmia nursing homes. *The Journal of Urmia Nursing and Midwifery Faculty*. 2014;12(10):926-34.
- [34] Alipor F, Sajadi H, Forozan A. The role of social support and quality of life in elderly. *Quarterly Journal of Social Welfare*. 2009;9(33):147-65 .(In persian).
- [35] Koenig G. Religion, spirituality and aging. *Aging and Mental Health*. 2006;10(1):670-9.
- [36] Tatsumura Y, Maskarinec G, Shumay D, M., Kakai H. Religious and spiritual resources. *Alternative Therapies in Health and Medicine*. 2003;9:64-71.
- [37] Meraviglia M, G. Prayer in people with cancer. *Cancer Nursing*. 2002;25:326-31.
- [38] Mui A, Shibusawa T. *Asian American Elders in the Twenty-First Century: Key Indicators of Well-Being*. New York: Columbia University 2008.
- [39] Mueller P, S., Plevak D, J., Rummans T, A. Religious involvement, Spirituality and Medicine: implications for clinical practice. *Mayo clinical Proceedings*. 2001;76:1225-35.
- [40] Carol ER, Colleen K, Linda KL, Barbara EA. A Randomized Controlled Trial to Determine the Efficacy of Sign ChiDo Exercise on Adaptation to Aging. *Research in Gerontological Nursing*. 2012;5(2):101-13.
- [41] Wachholtz A, Pargament K. Is Spirituality a Critical Ingredient of Meditation? Comparing the Effects of Spiritual Meditation, Secular Meditation, and Relaxation on Spiritual, Psychological, Cardiac, and Pain Outcomes. *J Behav Med*. 2005 (28):369-76.
-

ⁱWorld Health OrganizationⁱⁱSpiritual Well-Being