



ORIGINAL ARTICLE

Relationship between Various aspects of Life Style in Middle-aged Women

Nosaybeh Mahdipour¹, Hossein Shahnazi², Akbar Hassanzadeh³, Yaser Tabaraie⁴, Gholamreza Sharifirad^{5*}

¹Department of Health Education and Promotion, School of Public Health, Isfahan University of Medical Sciences

²Department of Health Education and Promotion, School of Public Health, Isfahan University of Medical Sciences

³Department of Epidemiology and Biostatistics, School of Public Health, Isfahan University of Medical Sciences

⁴Department of Public Health, School of Public Health, Sabzevar University Medical Sciences, Sabzevar, Iran

⁵Department of Health Education and Promotion, School of Public Health Isfahan University of Medical Sciences

E-mail address: sharifirad@hlth.mui.ac.ir

ABSTRACT

Nowadays, life style is the most important factor influencing on health and disease. According to the influence of women on family and society and the importance of middle age because of physiological and psychological changes in this period of life and also transitional role of Middle-age in transition from adulthood to old age, considering different aspects of lifestyle in this period seems essential for effective interventions. Therefore, the aim of this study was evaluation of the relationship between various aspects of lifestyle in middle-aged women in lenjan city of Isfahan province. This study is a descriptive analytical cross-sectional study. Samples consisted of 138 middle aged women of Zarinshahr which have been selected by systematic sampling. The data collection instrument was a researcher made 40-questions questionnaire that consisted of two parts of demographic data and various aspects of lifestyle (nutrition, physical activity, mental health and interpersonal relationships). Questionnaire was given to the target group after evaluating validity and reliability. Gathered data were entered into SPSS version 20 and analyzed by correlation statistical tests, Pearson and Spearman at the significant level of $\alpha=0/5$. The results showed that most women (97/1%) were married and highest level of education was elementary and junior (34/1%). Among the different aspects of lifestyle, the highest mean score (71/14%) was related to psychological health and the lowest mean score (42/69%) was related to physical activity. Results showed that the health status had significant correlation with all aspects of lifestyle. Based on the results of this study seem lifestyle modification of middle-aged women is a priority and need for development of their health Such as achieving the quality of life. For lifestyle modification and change of middle-aged women lifestyle, it seems necessary to perform more studies and interventional plan at the macro level to resolve the problems and improve the health status and implementation of a comprehensive training program in the field of life style.

Keywords: Healthy lifestyle, Lifestyle aspects, Middle-aged women

Received 19/10/2013 Accepted 22/11/2013

©2013 AEELS, INDIA

INTRODUCTION

Undoubtedly, lifestyle is one of the most important factors affecting the health status [1] Scientific evidence show that the choices and patterns of life style have influences on the health status and longevity [2, 3]. Healthy lifestyle is a way of life that leads to supply, maintain and promote the health and well-being. Lifestyle is defined under all of behaviors that are under his/her control or influence over the individual health risks [2]. Lifestyle encompasses various aspects that some of them include nutrition, exercise, self-care, use of tobacco, alcohol and illegal drugs, social relationships and stress control [4]. Statistics about the main causes of death indicate that 53 % of the causes of death related to lifestyle and 21% of the causes of death related to environmental conditions and 16 % of the causes related to

genetics and 10 % of the causes of death related to health care system [5]. Inappropriate lifestyle also is an effective factor on the chronic diseases like colon cancer, hypertension, chronic obstructive pulmonary disease, liver cirrhosis, peptic ulcer, cardiovascular disease [6]. In 2005, 35 million deaths due to chronic non-communicable diseases in the world occurred that form 60% of all deaths and 47% of the diseases burden. According to the World Health Organization reports, these rates are estimated 73% (three-quarters of all deaths) and 60% (disease burden), in 2020, respectively. This problem is even more serious in middle-income and poor countries and sometimes become epidemic that includes 80% of deaths. Unhealthy diet and inactivity and smoking are risk factors for chronic diseases. Elimination of these risk factors can prevent from cardiovascular diseases as well as stroke and type-2 diabetes, about 80% and can prevent from cancer, about 40% [7-9]. WHO believes that it is possible to confront with these risk factors by changing and modifying of lifestyle [10]. One of the most important factor in maintaining health, control and prevention of noninfectious diseases is physical activity [11]. Regular physical activity as an important behavior in improvement of health status, lead to prevention or delay of chronic disease and premature mortality. There is also several evidence that regular physical activity, lead to promotion of psychological health and reduce depression and anxiety and make life satisfaction [12] and lead to improving of life quality [13]. Physical activity has a protective effect against chronic diseases, including cardiovascular disease, hypertension, obesity, diabetes, osteoporosis, cancer, depression and anxiety. Accustomed to an active lifestyle is essential for the maintenance of health [14,15]. Nowadays, according to industrial way of life and reduced physical activity and in other word due to having of inactive physical lifestyle and according to increased prevalence of non-communicable diseases that inactivity is an important factor for it, WHO estimates that quarter of deaths in developed countries will related to non-communicable diseases until 2020 [16]. According to world health organization statistics, annually 1.9 million deaths in the world are due to physical inactivity. Also immobility is a risk factor for chronic diseases like coronary artery disease, colon cancer, diabetes, obesity, osteoporosis, hypertension and psychological disorders [17]. Another pillar of society health is providing of physical and mental needs through optimal nutrition [18]. The results of several studies indicate that approximately 35% of cancers are related to unhealthy diet pattern [19]. Epidemiologic studies have shown that there are inverse relation between the intake of fruits, vegetables and cancer rates [20]. Another important factor influencing the health is psychological health. World Health Organization define psychological health to the capacity of harmonious and coordinate relationship to others, changing and modification of individual and social environment and resolving of conflicts and personal desires by fair, reasonable and appropriate way. Kaplan defined psychological health to continuous adaptation with variable conditions and efforts to achievement of temperance between internal conflicts and the requirements of changing environment [21]. Nowadays, despite the deep cultural changes and changes in lifestyle, many people do not have the ability to deal with problems and crises in life and this issue caused to be vulnerable in facing with the problems and issues of life. The humans for adaptive coping with stresses and struggles need to some factors that equip them in acquiring of these abilities. These factors are very fundamental and they are shaped in human evolution [22]. Enjoyable and positive relationships between peoples are one of the most important components of social life. In an era known as the Age of Communication, it is not possible to play an active role without effective communication. In other words, the correct relationship is the individual basic needs to achieve personal and social development and success in life. In any situation, proper communication skills cause the life of his/her easier, more enjoyable and more successful. Communication skills called to a set of potential and actual skills that by help of it can achieve acceptable behavior to reach to the level of emotional relationship. This behavior is also called interpersonal skills which facilitate the establishment and strengthening of relationships with other members of the community [23]. Women in middle age are facing with physical and psychological changing associated with aging such as wrinkling, physical weakness, weight gain, negative mood and therefore they are vulnerable to loss of confidence and feelings of lack of control over life, reduced sense of well-being and wealth, lower quality of life and increased levels of depression and psychological problems. So that many health conditions that commonly occur throughout these ages, it may be a harbinger of future problems of women that lead to deaths and chronic disease in ageing [24]. In Middle-aged women, each of lifestyle factors independently and significantly is a predictor of several chronic diseases and mortality [25]. Nowadays, many health care systems have designed their plans based on family health. Women are considered family health axis and in addition to management of family member health, main pattern is education and promotion of healthy life style to the next generation. Women in all age groups have the greater population and their mean age and life expectancy are greater than men but their load of disability and morbidity are higher than men and have lower quality of life and they are facing with special problems due to their natural and physiologic conditions that these problems are the major causes of morbidity and mortality of them. In 1990, four

hundred and sixty-seven million women were on the age of 50 years or more that 40% of them lived in industrialized countries and 60% of them lived in developing countries. This number will reach to one billion two hundred million women until 2020 that despite the overall increase, the postmenopausal women ratio in industrialized countries decrease to 24% whereas in developing countries this ratio will increase to 76% [26].

Therefore, according to the influence of women in the family and community and importance of middle age period because of physiological and psychological changes and transitional role of the middle age period on the transition from adulthood and entry to old ages and influence of lifestyle in general health and quality of life, according to previous studies and lack of sufficient research in the field of lifestyle in the middle age period, this study survey the lifestyle of middle-aged women in Zarinchahr of Isfahan city.

MATERIALS AND METHODS

In this descriptive-analytical cross-sectional study, 138 middle-aged women in the age of 40-50 years that can respond and fill the questionnaire were selected by the method of systematic random sampling from two health center in Zarinchahr. The samples were obtained from medical records of families by uses of number table. Those who were forced to follow a specific diet or didn't have the ability of doing exercise or had mental disorder were excluded from the study. For survey the lifestyle were used from researcher-made questionnaire that consisted from two parts. The questionnaire included demographic characteristics (age, education, occupation, income, marital status) and 40 questions in four aspects of lifestyle (nutrition, physical activity, psychological health, interpersonal relationships). Each of the questions has four aspects that were designed based on the Likert multiple-choice question. Scores were variable from 0 to 3. In order to facilitate comparison of the obtained results were calculated based on 100 scores. Questionnaires were given to the 15 hygiene and nutrition education experts and their ideas for improving the questionnaire was applied for validity of the questionnaire. Reliability of this questionnaire were calculated $\alpha=0/74$ for the nutrition part and $\alpha=0/82$ for the part of physical activity and $\alpha=0/85$ for the part of psychological health and $\alpha=0/82$ for the part of inter-personal relationship by use of internal consistency examining. Obtaining the necessary license, retains the right to free choice of research units, ensuring from the confidentiality of collected information and non-disclosure of collected personal information of samples are the issues that observed in this study. Collected data were analyzed by use of SPSS software Ver.20 and descriptive statistics and by the way of frequency distribution, percentage, standard deviation and Spearman correlation test at a significance level of $\alpha<0/05$.

Findings:

The majority of research units (97/1%) were married. Most of samples (84/7%) were postmenopausal women and most of them (91/3%) were housewives. The education levels of the majority of them (34/1%) were elementary and junior. The majority of them (50/1%) have evaluated their economic status in moderate level and 76/8 % of them hadn't any history of disease.

Table 1: Frequency distribution of demographic characteristics of the study population

Variables		Number	Percentage
Marital status	Married	134	97/1
	Divorced	1	7
	Widow	3	2/2
	Total	138	100
Menopausal status	Menopause	21	15/3
	Non-menopausal	116	84/7
	total	138	100
Job status	Housekeeper	126	91/3
	Employed	12	8/7
	Total	138	100
	Illiterate	9	6/5
Education	Literacy	23	16/7
	Elementary and middle School	47	34/1
	late school	14	10/1
	Diploma	36	26/1
	Associate Degree and Bachelor's Degree	9	6/5
	Total	138	100
Economic status	Excellent	2	1/5
	Good	38	27/7
	Mediocre	81	59/1
	Weak	16	11/7
	Total	138	100
Disease History	Yes	32	23/2
	No	106	76/8
	Total	138	100

Status of each of the four dimensions assessed and lifestyle of the samples are shown in Table 2. The most unpleasant aspect of the quadripartite aspects of the samples was the aspect of physical activity with a mean score of 42/69±21 and the most desirable aspect was the aspect of psychological health with a mean score of 71/14±19/13.

Table 2: Mean scores and standard deviation of various aspects of lifestyle

Aspects of lifestyle	Average	Standard Deviation
Nutrition	70/40	12/11
Physical activity	42/69	21
Psychological health	71/14	19/13
Inter-personal relationship	67/87	19/46
The overall style of life	62/79	13/54

According to the results of this study, there is a positive and significant relationship between four aspects of lifestyle (nutrition, physical activity, psychological health, interpersonal relationships). (Table 3)

Table 3: Correlation coefficients of various aspects of lifestyle

Aspects of lifestyle	Nutrition		Physical activity		Psychological health		Interpersonal relationship	
	r	p	r	p	r	p	r	P
Nutrition	-	-	0/349	P<0/001	0/338	P<0/001	0/311	P<0/001
Physical activity	0/349	P<0/001	-	-	0/521	P<0/001	0/485	P<0/001
Psychological health	0/338	P<0/001	0/521	P<0/001	-	-	0/539	P<0/001
Interpersonal relationship	0/311	P<0/001	0/485	P<0/001	0/539	P<0/001	-	-
The overall style of life	0/579	P<0/001	0/800	P<0/001	0/815	P<0/001	0/798	P<0/001

Table 4 shows the relationship between demographic variables and lifestyle. There are a direct and significant relationship between economic status and the aspects of nutrition and psychological health. There are direct and significant relationship between educational level of the samples and the aspects of physical activity, psychological health and overall style of the life and there is a direct and significant relationship between health status and four under study aspects of life.

Table 4: The relationship between demographic variables and different aspects of life

Demographic Variables	Education		Economic Status		Health status	
	r	P	r	p	r	p
The aspects of lifestyle						
Nutrition	0/122	0/154	0/164	0/045	0/174	0/041
Physical activity	0/223	0/009	0/072	0/406	0/263	0/002
Psychological Health	0/212	0/013	0/167	0/042	0/299	0/001
Interpersonal relationship	0/051	0/560	0/138	0/116	0/332	0/001
The overall style of life	0/182	0/036	0/160	0/068	0/365	0/001

DISCUSSION

In this study, the mean score of overall lifestyle is 62/79. Among the different aspects of lifestyle, the highest score was related to psychological health and the lowest score was related to physical activity. In

Babanejad study, the score of lifestyle was 61. (27) In Maheri study, health promoting lifestyle status of the students of Tehran university dormitory were evaluated moderate [28]. That was consistent with the results of this study.

According to the results of this study, mean score of the aspect of nutrition was 70/40 that probably indicates a relatively good awareness of this age group. Among the causes of this issue can mention the existence of any chronic disease in the relatives such as spouse and parents, the tendency of samples to provide a healthy meal for the family and the existence of propaganda and undergraduate program in television. In the results of de Andrade study, also the adoption of healthy dietary practices was more common among older woman [29]. However, in the field of the amount of salt intake and fish oil, non-use of hydrogenated fat, the amount of consumption of food groups must ordain educational program to the individual, families and adoption of social measures. As it is mentioned in the study of Bion, changes in eating habits and an awareness of the importance of a balanced diet in order to prevent disease and achieve a better quality of life are needed [29].

The results of this study show that the mean score of physical activity in participants is 42/69. And seems that obtaining of such results can be due to physical inactivity in Iran and international community because of lifestyle changes, immobility, using of internet and doing personal and professional acts in passive mode (on the desk) and turning to doing motionless activity in leisure times like watching television and non-use of bicycle and walking rather than car.

The results of Ahmadi study showed that 89% of women that suffering from osteoporosis were on the group of low active or inactive [31]. And in the study of Motefaker, the amount of immobility in women was 54/4% [32] that the results were correspond to the results of this study.

The mean score of the aspect of psychological health in this study is 71/14. And also the results of Noorbala study showed that 34/2% of the peoples in the age of 15 or more were suspected to having a psychological disorder. (37/9% of women and 28/6% of men) and the women three times more than men are at risk of psychological disorders. [33] And also in the study of Ghorbani, 38/5% of women didn't have a good psychological health [34]. Rutter and Smith in 1995 were reported a significant increase in psychological social disorders in the young people's during past 50 years and cohort study in England showed an increase in emotional problems in young men and women during this period [35]. Other national, international and regional studies in the last decade showed the same trend [36].

In this study, the mean score of inter-personal relationship of participants is 67/87. Good communication with others can affect the psychological health because the peoples will be able to express their conditions like stressful conditions and desires or emotions like anger, hatred and intimacy with others, effectively. In researches often paid attention to communication skills in medical patients and staffs and less attention has been paid to this issue in the community. In Shean study mentioned that anxiety and experience of it have relation with inter-personal relationship [37]. And also Durak Batıgün study showed that training of communication skills can affect the improvement of life quality [38].

According to analysis carried out in this study, all of under-studied aspects were correlated. And this probably means that the mental- behavior patterns in one aspect will affect other aspects. Goodwin's study also has reported that there are a negative association between regular physical activity and depressive and anxiety disorders among adults in the United States of America [39]. Kim study also reported that peoples with desirable level of physical activity have better psychological health [40]. According to the results of Mortazavi study, physical exercise is an important strategy for maintaining and enhancing level of psychological health [41]. The results of Hendricks study showed that healthy behavior such as adjustment of intake energy and physical activity occur together [42].

Therefore it seems that by intervention in one aspect can be hoped that other aspects also improved.

According to the results of this study, it seems that higher level of education affect healthy lifestyle with influencing on cognition and better understanding of motive factors. Also in this study, the peoples who were assessed their health status is better, had better lifestyle. Probably, putting dynamic activity in daily life and exercising and spending more times with family and friends and good communication with them, choosing healthier food can affect assessment of health status, undoubtedly. In Speck study discussed about direct relationship between health status and active lifestyle [43]. In this study, peoples who had evaluated their economic situation are better obtained higher scores in the aspects of nutrition and psychological health. And possibly it is for the reason that one of the main reasons in choosing of the food basket of household, consumption of fruits and vegetables, fish and protein, using oil instead of hydrogenated fats is household income. And one of the main concerns of modern economic world is individual income and economic status that could easily affect psychological health. In Feizi study, also economic status and educational level of participants affected the life quality [44].

CONCLUSION

As a total conclusion of this study can be stated that lifestyle status of Middle-aged women in Zarinchahr are moderate and there is the possibility of enhancing it towards the desired status. In fact, it is essential for healthy developmental measures.

Therefore, it can execute educational programs at the community level, care-centers, gymnasiums, schools, cultural centers and mosques and it can educate peoples in the field of psychological health such as correct ways of social and familial communication, reduction of challenging factors in house and outdoors, physical activities and correct patterns of nutrition. And it can use from accompaniment of spouse for changing, modifying and maintaining of healthy lifestyle. In order to proper and inclusive educating should also addressing to culture such as preparation of various programs of audio and video media in order to change, modify or sustain a healthy lifestyle as well as providing the counseling centers of culture and cultural-sportive landmarks especially for women. The limitation of this study is the base of assessment of samples status that in all of aspects of lifestyle were self-assessment and it is possible that the responses were proportionately affected by social and cultural factors. Although we have tried to controlling the limitation of this study by explanation of the purposes of the research and appropriate communication but complete control is not possible. Another limitation of the present study is the lack of studies on the lifestyle of the targeted group of middle-aged women that it led the researchers found their findings similar to other studies and different with the targeted group especially in the part of discussion.

ACKNOWLEDGMENTS

This article was taken from the MS Thesis No. 3914444. We have a lot of thanks and appreciation from the research Vice Chancellor of the health university, staffs of healthcare centers of Zarinchahr and all of women participating in the study.

REFERENCES

1. Melanie Mc Ewen. (2008). Community – based Learning: an introduction .3nd Edition Philadelphia: Mosby Co;
2. Mohammadi Zeidi I , Pakpour Hajiagha A , Mohammadi Zeidi B. (2012). Reliability and Validity of Persian Version of the Health-Promoting Lifestyle Profile . J Mazand Univ Med Sci ; 22(1):103-113.[persion]
3. Cakir H, Pinar R. (2006). Randomized controlled trial on lifestyle modification in hypertensive patients. Western J Nurs Res ; 28(2): 190-209
4. Mcdonald S, Thompson C. Women's health. Sydney: Elsevier;(2005).
5. Moher M. (1995). Evidence of the effectiveness of intervention for secondary prevention and treatment of coronary heart disease in primary care. Oxford: Anglia and Oxford Regional Health Authority.
6. Black J, Hawk JH, Keene AM. (2005). Medical surgical of nursing. Philadelphia:W.B. Saunders.
7. WHO. (2009). Intervention on diet and physical activity:what works. Summary report. Available atURL: <http://www.who.int/dietphysicalactivity/whatworks/en>. Accessed feb11, 2010
8. WHO. (2004). Global strategy on diet, physical activity and health, The Fifty-seventh World Health Assembly.2004. Available at URL:<http://www.who.int/entity/media centre /events>. Accessed May 22.
9. Report of a Joint WHO/FAO Expert Consultation. (2003). Diet, nutrition and the prevention of chronic diseases. Geneva Available at URL: http://www.who.int/hpr/NPH/docs/who_fao_expert_report.pdf. Accessed November20, 2012.
10. Ahmadvand A , etal. (2002). Global health report 2002, risk reduction, improving healthy life. Tehran: Great Ebne Sina institute, [persian]
11. Inter health steering committee. Demonstration projects for the integrated prevention and control of non-communicable disease Inter health program: epidemiological background and rationale. World health stat Q 1991; 44:48-504
12. Aghamolaei T. (2008). Self-efficacy, benefits and barriers to regular physical activity Hormozgan University of Medical Sciences. Iranian Journal of Epidemiology ;4(3,4):9-15
13. Giacobbi PR JR, Stancil M, Hardin B, Bryant L. (2008). Physical activity and quality of life experienced by highly active individuals with physical disabilities. Adapt Phys Active Q ;25: 189-207
14. Asadi Dehkhurghani A. (2002). Study of life Methods on the Nutvitional chronic disease. MSc thesis.Tabriz University of Medical sciences;[persion]
15. Warburton D, Nicol C, Bredin S. (2006). Health benefits of physical activity: the evidence. CMAJ ; 174(6): 801-9.
16. World Health Organization. Global strategy for non-communicable disease prevention and control. (Draft). Geneva: WHO; 1997.
17. Yap TL, Davis LS. (2008). Physical activity: the science of health promotion through tailored messages. Rehabil Nurs ; 33(2):55-62.
18. Farivar F, et al . (2009). Knowledge, attitude and practice of urban households on the principles of Applied Nutrition. Iranian Journal of Epidemiology ;5(2):11-18.[Persian]
19. Khezeli1 M, Ramezankhani A, Bakhtiyari M. (2012). Effect of Education on Nutritional Knowledge and Stages of Fruit and Vegetable Consumption in Elders Based on Stages of Change Model;J Mazand Univ Med Sic 2012;22(91):90-100.[Persian]

20. Johnston CS, Taylor CA, Hampl JS. (2000). More Americans are eating 5 a day but intakes of dark green and cruciferous vegetables remain low. *J Nutr* ; 130(12): 3063-3067.
21. Kaplan, L. (1971). Education and mental health. New York: Harper and Row.
22. A. Ramazani , M. Miri , F. Shayegan , (2008). Effect of health education on health coordinating volunteers of Birjand health center to promote the community healthy life styles. *Journal of Birjand University of Medical Sciences* ; 14(4):27-33.[persian]
23. Maguir P, Pitceathly C. (2002). Key communication skills and how to acquire them. *BMJ* ; 325(7366): 697-700.
24. Amore M, Donato PD, Berti A, et al. Sexual and psychological symptoms in the climacteric years. *Maturitas*. 2007; 56: 303-311
25. Van Dam R, Li T, Spiegelman D, et al. (2008). Combined impact of lifestyle factors on mortality:Prospective cohort study in us women. *BMJ*. ; 337:a1440
26. Norozi E,Shrifirad Gh,etal . (2010). Factors Related with Quality of Life among Postmenopausal Women in Isfahan, Iran, based on Behavioral Analysis Phase of PRECEDE Model. MSc thesis. Isfahan.Isfahan University of medical Sciences;2010-2011.[persian]
27. Babanejad M, Rajabi A, Mohammadi S , Partovi F , Delpisheh A. (2013). Investigation Lifestyle and Prediction of Changes in Its Associated Factors amongst Health Students.*Journal of Health*;4(2): 147 – 155.[Persian]
28. Maheri A, Bahrami MN , Sadeghi R. . (2013). The Situation of Health-Promoting Lifestyle among the Students Living in Dormitories of Tehran University of Medical Sciences, Iran.*Journal of Health & Development*; 1(4 :275-286.[Persian]
29. de Andrade KA, de Toledo MT, Lopes MS, do Carmo GE, Lopes AC. (2012). Counseling regarding healthy lifestyles in primary healthcare and the dietary practices of clients . *Rev Esc Enferm USP* ;46(5):1117-24
30. Bion FM, Chagas MH, Muniz Gde S, de Sousa LG. (2003). Nutritional status, nthropometrical measurements, socio-economic status, and physical activity in razilian university students. *Nutr Hosp* ;23(3):234-41
31. Ahmadi A, Zamani Nour N, Rahmdel S, Faraji N, Tavakoli Olyae R . (2012). Pattern of nutrition, physical activity level and body mass index (BMI) in women with osteoporosis. *J Jahrom Univ Med Sci* ; 10(3):27-32.[Persian]
32. Motefaker M,Sadrbafighi S.M,Rafiee M,Bahadorzadeh L,Namayandeh SM,Karimi M,Abdoli AM. (2007). Epidemlogy of physical activity ;pupolation based study in YAZD City.Tehran University Medical Journal ; 65(4):77-81.[Persian]
33. Noorbala AA , Bagheri Yazdi SA , Asadi Lari M, Vaez Mahdavi MR.Mental Health Status of Individuals Fifteen Years and Older in Tehran-Iran (2009). *Iranian Journal of Psychiatry and Clinical Psychology* 2011;16(4):479-483. [Persian]
34. Ghorbani A , Golchin M. (2011). Investigating the mental health status of women in Qazvin Province (2008). *J. Qazvin Univ. Med. Sci.* 2011; 15 (1): 56-62. [Persian]
35. Collishaw S, Maughan B, Goodman R, Pickles A. (2004). Time trends in adolescent mental health. *J Child Psychol Psychiatry*;45(8):1350-62.
36. Winzer R, Brucefors AB. (2007). Does a short-term intervention promote mental and general health among young adults? - An evaluation of counselling.*BMC Public Health* ; 7:319.
37. Shean G, Uchenwa U . (1990). Interpersonal style and anxiety. *J Psychol*; 124(4):403-8.
38. Durak Batgün A, Hisli Şahin N, Karlı Demirel E. (2011). Stress, self-perception and interpersonal style in patients with physical illnesses. *Turk Psikiyatri Derg*; 22(4):245-54.
39. Goodwin Renee D, (2003). Association between physical Activity and mental disorders among adults in the United States, *Preventive medicine* ; 36: 698-703.
40. Kim YS, Park YS, Allegrante JP, Marks R, Ok H, Ok Cho K, Garber CE. (2012). Relationship between physical activity and general mental health. *Preventive Medicine* ; 55 : 458–463
41. Mortazavi SS , Eftekhar Ardebili H , Eshaghi SR , Dorali Beni R , Shahsiah M ,Botlani S . (2012). The Effectiveness of Regular Physical Activity on Mental Health in Elderly.*Journal of Isfahan Medical School*; 29(161):1519-1528.[persian]
42. Hendricks K M , Herbold N , Fung T. (2004). Diet and other lifestyle behaviors in young college women.*Nutrition Research*; 24 : 981–991
43. Speck BJ, Harrell JS. (2003). Maintaining regular physical activity in women: evidence to date. *J Cardiovasc Nurs* ;18(4):282-91 .
44. Feizi A, Hosseini R, Ghasvand R, Rabiei K. (2011). Study of Relationship between Stress and Different Lifestyle Dimensions with Quality of Life in Isfahan's Inhabitants Aged 19 and Older an Application of Latent Class Regression on Latent Factor Predictors. *Journal of Health Systems Research* ;7(6):1188-1202. [Persian].

Citation of this article

Nosaybeh M. , Hossein S , Akbar H. , Yaser T., Gholamreza S.Relationship between Various aspects of Life Style in Middle-aged Women. *Bull. Env. Pharmacol. Life Sci.*, Vol 3 (1) December 2013: 68-74