



General Health Status, Quality of Life and Social Support of Young Athletes and Young Non-Athletes in Yazd

Seyed Saeed Mazloomy Mahmoodabad ^a, Nahid Ardian ^{a*}, Hadi Eslami ^b

^a Social Determinants of Health Research Center, School of Public Health, Shahid Sadoughi University of Medical Sciences, Yazd, Iran.

^b Department of Environmental Health Engineering, School of Health, Rafsanjan University of Medical Sciences, Rafsanjan, Iran.

ARTICLEINFO

ORIGINAL ARTICLE

Article History:

Received: 16 Dec 2018 Revised: 4 May 2019 Accepted: 19 May 2019

*Corresponding Author: Nahid Ardian

Email:

n_ardian1382@hotmail.com

Tel: +98 9132506563

Citation:

Mazloomy Mahmoodabad SS, Ardian A, Eslami H. General Health Status, Quality of Life and Social Support of Young Athletes and Young Non-Athletes in Yazd Province. Social Behavior Research & Health (SBRH). 2019; 3(1): 331-339.

ABSTRACT

Background: One of the factors influencing the level of general health and quality of life of individuals, is the level of social support that people enjoy. Given the importance of general health, quality of life and the amount of social support and their relationship with the level of physical activity in young people in Yazd province counties were studied.

Methods: The study population of this descriptive, cross-sectional study consisted of 15- to 29-year-old people. Given the study population, sample size was calculated for the counties Yazd, Mehriz, Ardakan and Meybod separately.

Methods: A total of 1533 people were selected by cluster sampling, and a person aged 15-29 years from each family completed the questionnaire. The questionnaire used, in addition to demographic questions, included three sections general health questionnaire (GHQ-28), Multidimensional Scale of Perceived Social Support, and World Health Organization Quality Of Life Brief (WHOQOL-BREF). The data were analyzed by SPSS₁₈, nonparametric statistical tests and Pearson's correlation.

Results: The mean general health score of youth was 30.82 (9.56) and the mean scores of their quality of life and social support were 38.32 (8.67) and 42.64 (7.73), respectively. Mental health, quality of life and social support were significantly associated with education level (P-value ≤ 0.001).

The quality of life of young athletes was higher than that of young nonathletes (P-value ≤ 0.001). General health and social support were higher in women than in men (P-value ≤ 0.001).

Conclusion: The general health level of Yazd youth is higher than the cut-off point and not optimal, but based on social and cultural conditions in this province, the levels of social support and quality of life were found to be satisfactory. Planning to increase the level of vitality and exercise in different fields can be an opportunity to improve the general health of young people.

Keywords: General Health, Quality Of Life, Social Support, Sports, Youth

Copyright: This is an Open Access article distributed under the terms of the creative commons Attribution 4.0 license (http://creativecommons.org/licenses/by/4.0) which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.



Introduction

If mental health, according to the definition of the World Health Organization, is considered as complete comfort and biological and psychosocial well-being, and not merely the absence of illness and disability, the importance of this component in human life can be understood.

Absence of or defect in mental health prevents the advancement of the individual and society and deprives one of the ability to perform the duties properly and play social roles. As a result, the individual and society are exposed to damage.¹

According to the World Health Organization statistics, 12% of illnesses across the world are due to mental health problems, or general health. Sixty percent of health problems in middle aged people are related to mental disorders.²

Satisfaction with life as one of the concepts of general health can have a positive relationship with the amount of death in the opposition and the length of life of the people.

Quality of life indicates one's perception of his/her own ability to perform well at the physical, psychological and social level.³

The gap between the expectations and the experiences of individuals from life is called the quality of life, and the important dimensions of this concept include the individual's view of his/her own general health and satisfaction with the physical, psychological, social and economic dimensions of life.⁴

Social support has various impacts on the health of individuals. For example, feelings of self-esteem, greater belonging and positive attitudes are seen in the individuals who enjoy more support. The level of feeling of the existence of support not only reduces the amount of stress, but also makes the individual's body resistant to infectious diseases.⁵

The role of social support as a source in coping with stress and mental and physical symptoms has been well documented.

Social support is a multidimensional construct that includes the spectrum of social network, emotional support, instrumental support, quality of social support and mutual assistance from others. Social support is associated with decreased risk of illness and plays a part in promoting healthy behaviors and exploiting health care.¹

According to many sociologists, the degree of tendency to and progress in sports are highly associated with current social and cultural indicators.

Quality of life is associated with exercise and physical activity. Bourdieu believes that the the desire to exercise and reasons for different trends depend on the economic status of individuals, education level, and the level of cultural understanding of trends and habits of life.⁶

Social support is divided into received or objective social support and subjective social support.

Understanding the support is more important than its receiving. In other words, the attitude of the individual to the received support is more important than the level of support provided to him.⁷

Failure to understand social support has many consequences for society. This does not allow people to properly perform their duties and disrupts the performance of people in the community.^{8, 9} and Social support adjustment to cancer: correlational, Reconciling descriptive, and intervention research. The higher the level of social support, the higher the level of health, and vice versa. Obviously, support is beneficial, and social support leads to mental health and higher levels of social support are associated with lower levels of depression and anxiety.¹⁰

It must be pointed out that there is a relationship between doing exercise and the health status, quality of life and the level of social support in young people, so that studies have shown the benefits of the exercise program in increasing life expectancy and reducing disabilities as much as possible.¹¹

In this study, given the role of general health, quality of life and the amount of social support and their relationship with the level of physical activity in young people, these variables were studied in young athletes and young non-athletes in Yazd province.



Methods

The study population of this descriptive, crosssectional study consisted of 15- to 29-year-old people. According to the demographic and cultural similarities and differences among the counties of the province, the cities Yazd, Mehriz, Ardakan and Meybod were selected.

Given the study population, sample size for each county was calculated separately, and a total of 1639 people were selected by cluster sampling.

From each city, based on the municipal district, a few neighborhoods, and from each neighborhood, a few alleys as clusters were selected and all houses in the selected alleys were separately referred to and the questionnaires were provided by a trained interviewer to youth and adolescents and collected after completion.

From each family, one young man or woman aged 15 to 29 years was enrolled, and after he/she provided consent to participate in the study, the questionnaire was filled out.

The questionnaire used in this study, in addition to demographic questions, included three standard questionnaires:

1- General Health Questionnaire (GHQ-28)

It consists of 28 items. The questionnaire was designed by Goldberg and Hillier (1979) and consists of 4 subscales, each of which are investigated by 7 items.

The items are rated by a 4-point Likert scale, resulting in a total score ranging from 0 to 84, and the cutoff point was considered to be 23, with a higher score indicating lower mental health.

The reliability of the entire questionnaire has been reported 0.91 and those of the subscales between 0.77 and 0.82. The GHQ was developed by David Goldberg in 1972 to identify mental disorders in various settings and has been used frequently in various studies in Iran .^{12, 13}

2- Quality of life Questionnaire.

The questionnaire is used to measure the quality of life, and the WHOQOL-BREF was developed by the collaboration of 15 international centers in 1989.

The questionnaire consists of 24 items divided

into 4 domains and the first two items do not belong to any of the domains but assess the health status and quality of life in general. The questionnaire has a total of 26 items and includes the following domains: a) physical health; b) the psychological domain; social relationships; and the living environment.

Scoring: The score on each item ranges from 1 to 5, from Absolutely dissatisfied, Not satisfied, Relatively dissatisfied, Satisfied, and Absolutely satisfied. The minimum and maximum possible scores on the questionnaire are 26 and 130, respectively.

The Cronbach's alpha coefficient has been reported to range from 0.73 to 0.89 for the four subscales and the total scale. In Iran, for the reliability of the scale, three methods have been used, test-retest with a 3-week interval, split-half, and Cronbach's alpha coefficient reported as being 0.70, 0.87, 0.87, respectively.¹⁴

3- Multidimensional Scale of Perceived Social Support (MSPSS)

The MSPSS was used to measure social support. The scale consists of 12 items that measure the three components, namely, perceived family support (4 items), perceived support from other people (4 items) and perceived support from friends (4 items).

All items of this scale are graded on a 5-degree (1-5) Likert scale (Absolutely agree, Agree, No idea, Disagree, and Absolutely disagree). The attainable scores on the MSPSS range from 12 to 60.

Lower scores represent less support and higher scores indicate higher total social support, or in terms of subscales, more support.

In Iran, for the first time after the translation of the questionnaire by Masoudnia and according to the comments of several psychologists regarding its standardization, the principal component analysis on 12 items was used.

The internal consistency coefficients of the subscales perceived family support, perceived support from other people, and perceived support from friends were calculated using Cronbach's alpha



at 0.78, 0.81, and 0.87, respectively.¹⁵

In this study, Cronbach's alpha was calculated for the three subscales perceived family support, perceived support from other people, and perceived support from friends at 0.80, 0.78, and 0.81, respectively. The data were entered into the SPSS version 18, and then analyzed using Pearson's correlation coefficient and nonparametric statistical tests.

The proposal was approved at the Ethics Committee of the Sports and Youth Organization and the participants' providing consent to participate in the study was a condition for their completing the questionnaires.

Results

The population of this study consisted of 1639

young people in Yazd and other cities of the province, of whom 427 (26.1%) lived in Yazd and 1212 (73.9%) lived in the other cities. Of the 1639 participants, 932 (57.1%) were female and 699 (42.9%) male. Of the participants, 335 (21.2%) had an education level of under high school diploma, 759 (48.1%) had high school diploma and associate's degree, and 483 (30.6%) had bachelor's degree and higher education level.

Of our participants, 800 (50.1%) were single and 798 (49.9%) married, and 552 (35%) were employed and 1024 (65%) unemployed. 596 (36.9%) of the participants reported to do exercise habitually and 1021 (63.1%) reported not to specify any time for doing exercise.

social support of youth in Yazd province							
Variables	Mean (SD)						
General health							
Physical dysfunction	30.35 - 31.28	30.82 (9.56)					
Anxiety	6.46 - 6.78	6.62 (3.37)					
Social dysfunction	6.35 - 6.79	6.57 (4.47)					
Depression	11.61 - 11.87	11.74 (269)					
	Quality of life						
Physical health	9.17 - 9.42	9.29 (2.48)					
Mental health	9.79 - 10.05	9.92 (2.73)					
Social relationships	8.20 - 8.48	8.34 (2.90)					
Environmental health	10.30 - 10.56	10.43 (2.65)					
Total quality of life score	37.88 - 38.74	38.32 (8.67)					
· ·	Social support	× ,					
Others' support	••						
Family's support	13.71 - 14.00	13.86 (2.96)					
Friends' support	13.63 - 13.95	13.79 (3.16)					
Total social support	14.74 - 15.11	14.92 (3.68)					



Demo	Demographic		General	health	Quality of life		Social support	
	teristics 1639	Ν	Mean (SD)	Significance level *	Mean (SD)	Significance level *	Mean (SD)	Significance level *
	Less than 20	519	31.31 (0.22)	0.46	37.60 (8.78)	0.021	41.99 (8.56)	
Age (yr)	25-20	629	30.75 (9.05)		38.41 (8.39)		43.06 (8.63)	0.141
	26-29	491	30.51 (9.45)		39.11 (8.77)		42.66 (8.90)	
Female Gender Male	932	31.96 (9.53)	0.000	38.47 (8.55)	0.490	43.41 (8.35)	0.000	
	707	29.43 (9.36)		38.15 (8.86)		41.61 (9.10)		
	Under high school diploma	335	31.09 (10.52)		37.58 (9.53)		42.13 (9.14)	
Education level	High school diploma and associate's degree	821	31.28 (9.32)	0.03	39.20 (8.61)	0.001	42.15 (8.57)	0.004
Bachelor's degree and higher	degree and	483	29.93 (8.92)		37.48 (7.84)		43.78 (8.60)	
Marital	Single	841	31.34 (10.17)		38.47 (8.72)	0.427	40.77 (9.14)	0.000
status	Married	798	30.23 (8.77)	0.07	38.47 (8.72)		40.77 (9.14)	
Employment	Employed	552	29.85 (9.27)	0.001	37.77 (8.22)	0.136	42.87 (8.85)	0.390
status	Unemployed	1087	31.40 (9.51)		38.58 (8.86)		42.46 (8.61)	
Doing exercise	Yes No	618 1021	30.56 (9.42) 30.94 (9.48	0.529	36.64 (8.47) 39.22 (8.59)	0.001	42.68 (8.48) 42.60 (8.86)	0.864

Table 2. The mean scores of different dimensions of general health, quality of life and social sur

Table 3. Pearson's correlation coefficients between general health and quality of life and social support in Yazd youth						
Parameters	Quality of Life	General	Social Support			
Quality of life	1					
General health	$r = -0.525^{**}$	1				
Social support	$r = 0.485^{**}$	$r = 0.249^{**}$	1			

Statistically significant relationship: * P-value ≤ 0.05 and ** P- value ≤ 0.001 ** r: Pearson's correlation coefficient

Discussion

The present study was conducted to investigate the general health and quality of life, and the level of social support and its relationship with the reported rate of doing physical activities among youth in Yazd.

The results showed that the average general health score of 42% of young people in Yazd province was higher than the cutoff point 23, indicating the general health of the youth is at risk. This figure seems high in comparison with the general health of the population of Iran.

The study of Noorbala on mental health status in people aged 15 years and older in Iran showed that 21% of the subjects were suspected of having a mental disorder.¹⁶

In a study in indigenous people in Yazd, the percentage of people at risk of mental health was about 20%.¹⁰ However, in another study in Yazd province, the percentage of general health among the miners in Bafgh was reported to be 38%.¹⁷



The results showed that there was no significant difference between the mean score of general health among age groups, which can be due to the fact that our sample population did not have very different age groups and all of them were young people aged 15-29. But results showed that although there was no significant difference in general health score between age groups in the youth, as their age increased, their general health improved. In the national study of Noorbala in all age groups, mental health decreased as age increased.¹⁶

The results showed that the average general health score was higher in women than in men, or in other words, women's mental health was at higher risk than men's.

It seems that due to lack of recreational facilities in the desert province of Yazd, the less possibility of girls' attending these facilities and the type of culture of the population, girls enjoy lower levels of general health, as in another study in the students of Yazd University of Medical Sciences, girls had lower general health.¹⁸

In the present study, the difference in the mean general health score among different education levels was statistically significant, which is contrary to some studies¹⁹ and as education level in participants increased, their general health improved. It can be argued that as education level increases in Yazdi youth, they are more likely to have appropriate facilities or to have a better mental health depending on the amount of their success and satisfaction. Education level is one of the factors affecting mental disorders and also one of the preventive factors for these disorders .²⁰

Between the general health and quality of life in youth, a significant and inverse correlation was observed. To interpret this result, it can be argued that in the youth, the higher the level of mental health is, the better the quality of life is and the higher the social support is. It seems that individuals who consider their quality of life to be desirable naturally have a better mental health, which has been confirmed in other studies.²¹

The quality of life refers to the person's

perceptual judgment on life satisfaction, including his health status.²² It can be argued that, based on the results, the mean score on general quality of life was not significantly different between the married and single young people in Yazd province.

However, no significant relationship with the marital status was observed in the study of Tabraei. ²³ The level of social support in both married and single people was quite significant. It seems logical that couples show more support for each other.²⁴

General health was not significantly different between the people who reported to do exercise habitually and those who reported not to do exercise, but in some studies, the role of exercise in general health has been confirmed. For example, a study by Mazloomy showed that students who are exercising have better mental health.¹⁸

However, the cited study has been conducted on students, and it should be noted that the study populations of these studies were not exactly the same as our study population.

Considering that general health includes the subscales physical health, anxiety, social functioning and depression, the subscales should be addressed with regards to sports activity.

In this regard, the subscales physical functioning and anxiety were not significantly different between the group that had sports activity and those who did not have.

The results of our study indicated that as sports activity in young people increased, their physical functioning improved and the level of their anxiety decreased, so that Naghibzadeh in a similar study reported that there was a significant relationship between sports activities and the three subscales physical health, anxiety and depression .²⁵

The mean score of quality of life was significantly higher in the individuals who reported to do exercise habitually than in those who reported not to do exercise, as other studies have confirmed this finding.²⁶

Although in this study, in contrast to some studies,²⁷ no significant difference was observed between athletes and non-athletes with respect to social support level, it can be argued that Yazdi



youth have some degree of family support which is not related to doing exercise.

According to the results of this study, the Yazd youth attained less than half the score assigned to quality of life, which is lower compared to the quality of life reported by some studies in Yazd.¹⁷

The relationship between quality of life and social support in this study was also confirmed by the results of another study.²⁸

The results indicate that there is no significant difference in the quality of life with respect to gender, which is consistent with another study.²³ Despite significant differences related to family-occupational roles, the inference of young people about their status of quality of life and gender did not show a significant relationship.

Quality of life, social support and general health showed a significant difference at different education levels.

It seems sensible that as the education level of young people increases, their quality of life increases as well.

Higher education level leads to logical thinking in the individual so that he/she can look at life in a way that they feel to have a higher level of quality of life.

It should be mentioned that the impact of education level on quality of life has also been confirmed in another study.²⁹

The general health of the participants in the study was significantly different with respect to employment status, but no significant difference was observed in quality of life and social support in our participants. However, in some studies, a relationship between the type of occupation and job satisfaction and quality of life has been noted.³⁰ It is likely that because of the type of jobs young people hold and they usually do not assume heavy responsibilities, they still do not have enough sensitivity to the type of occupation to understand its serious impact on their quality of life. In today's world, people in everyday life experience stress, and inevitably make attempt to respond in some way.

Most studies have focused on the beneficial effects of social support on the health and wellbeing of individuals, in a way that social support contributes to protecting against stress.²¹

The results of our study showed that the average social support in the youth of the province under study was desirable, confirmed by the family's support of children and especially single children and the children who live with family.

Conclusion

The results of the study showed that the three variables general health, quality of life, and social support were influenced by education level, sex, and marital status. Moreover, the mental health of the youth in Yazd was higher than the cutoff point and not satisfactory, but due to social and cultural conditions of the province, they enjoyed good social support and quality of life.

Conflicts of Interest

The authors have no conflict of interest to disclose.

Acknowledgments

The authors of this article express their gratitude and appreciation to all the participants in this study. Further, in the current study all ethical issues were observed base on the Helsinki Declaration.

Authors' Contribution

Conceptualization, S.S.M.M and N.A.; Methodology, H.E.; Formal Analysis, N.A., Investigation, S.S.M.M.; Data Curation, H.E., Writing – Original Draft, N.A. and H.E.; Writing – Review and Editing, S.S.M.M; Resources, N.A.; Supervision, H.E.

All authors read and approved the final manuscript and are responsible about any question related to article.

References

1. Garousi S, Safizadeh H, Samadian F. The study of relationship between social support and quality of life among elderly people in Kerman. Jundishapur Scientific Medical Journal. 2012;11(3):303-315. [Persian]



2. Sharma R, Rasania SK, Verma A, Singh S. Study of prevalence and response to needle stick injuries among health care workers in a tertiary care hospital in Delhi, India. Indian Journal of Community Medicine. 2010;35(1):74.

3. Schram MT, Baan CA ,Pouwer F. Depression and quality of life in patients with diabetes: A systematic review from the European Depression in Diabetes (EDID) research consortium. Current Diabetes Reviews. 2009;5(2):112-119.

4. Kimm H, Sull JW, Gombojav B, Yi S-W, Ohrr H. Life satisfaction and mortality in elderly people: The Kangwha cohort study. BMC Public Health.2012;12(1):54.

5. Nourbakhsh Y, Heidarkhani H, Mohammadi A. Investigating the relationship between social support and underlying variables with social health of young people in marginalized areas of Kermanshah. Journal of Social Problems of Iran. 2017;8(2):233-257.

6. Abedini S, Talebi S. The socio-economical factors related to the degree of tendency of citizens toward public sports in Khalkal. Journal of Applied Sociology. 2017;28(1):131-144.

7. King MB, Whipple RH, Gruman CA, Judge JO, Schmidt JA, Wolfson LI. The performance enhancement project: Improving physical performance in older persons. Archives of Physical Medicine and Rehabilitation. 2002;83(8):1060-1069.

8. Patterson SL, Rodgers MM, Macko RF, Forrester LW. Effect of treadmill exercise training on spatial and temporal gait parameters in subjects with chronic stroke: A preliminary report. Journal of Rehabilitation Research and Development. 2008;45(2):221.

9. Schenkman M, Hall D, Kumar R, Kohrt WM. Endurance exercise training to improve economy of movement of people with Parkinson disease: three case reports. Physical Therapy. 2008;88(1):63-76.

10. Rabanipour N, Roohafza H, Feizi A, Rabiei K, Sarrafzadegan N .The association between mental health and quality of life: A cross-sectional study in a large sample of Isfahan Steal Company's employees. Journal of Fundamentals of Mental Health. 2018;20(5):368-375.

11. Zameni L, Bahram A, Khalaji H, Ghadiri F, Hasani G .Biological Maturation and Physical Activity among Female Adolescents in Mazandaran, Iran, in 2017: Moderating role of social support. Medical Journal of Mashhad University of Medical Sciences. 2017;60(3):528-538. [Persian]

12. Mohammadi MR, Davidian H, Noorbala AA, et al. An epidemiological survey of psychiatric disorders in Iran. Clinical Practice and Epidemiology in Mental Health. 2005;1.

13. Ardian N, Mahmoudabad SSM, Ardian M, Karimi M. General health of foreign-origin groups and native population. Global Journal of Health Science. 2014;6(5):55.

14. Ghorji M, Keshavarz Z, Ebadi A, Nasiri M. Persian Translation and Psychometric Properties of Professional Quality of Life Scale (ProQOL) for Health Care Providers. Journal of Mazandaran University of Medical Sciences. 2018;28(163):93-106. [Persian]

15. Masoudnia E. Relationship between perceived social support and risk of postpartum depression disorder. Iranian Journal of Nursing. 2011;70(24):8-18. [Persian]

16. Noorbala AA, Bagheri Yazdi SA, Yasamy MT, Mohammad K. Mental health survey of the adult population in Iran. British Journal of Psychiatry. 2004;184:70-73.

17. Nahid A, Saeid MMS, Mahdi A, Hassan EM, Hadi E. The mental health and social support in Bafq's miners. Health Sciences Research. 2015;2(5):39-44.

18. Mahmoudabad SSM, Ardian N, Salmani I, Hajian N. Comparing Mental Health of Female Athlete and Non-Athlete Students of Shahid Sadoughi University of Medical Sciences. Journal of Community Health Research. 2013;2(3):188-195.

19. Halvani Gholam Hosein, Morowati Sharifabad Mohammad Ali, Hosein. BmM. Determining thegeneral health status of workers of Kuushk mine. Koomesh. 2007;8(4):261-268. [Persian]

20. Khodabakhshi KA, Mostafa B, Falsafinejad MR, Shahdadi H. the relationship of quality of life with health literacy in male patients with type II diabetes: A cross-sectional study in Harsin City, 2015. Journal of Diabetes Nursing. 2016;4(4):10-20. [Persian]

21. Mokhtari Z, Hokmi M, Mokhtari G. Relationship between mental health and quality of life in athletes in Hamedan. Journal of Health Psychology. 2010;1(2):131-149.



22. Böhnke P. First European Quality of Life Survey: Life satisfaction, happiness and sense of belonging: Office for Official Publications in the European Communities; 2005.

23. Tabraei Y, ShahSiyah M, Asadi M, Mohebi M. The correlation between emotional intelligence and quality of life among students of Qom University of Medical Sciences in 2009. Knowledge & Health. 2010;5:79-88. [Persian]

24. Bakhtiyari M, Emaminaeini M, Hatami H, Khodakarim S, Sahaf R. Depression and perceived social support in the elderly. Iranian Journal of Ageing. 2017;12(2):192-207. [Persian]

25. Naghib Zadeh M, Rashnavadi Nejhad J. Relationship between Physical Fitness and General Health among Female Students of Ilam University. scientific journal of ilam university of medical sciences. 2014;22(3):59-66. [Persian]

26. Kalateh Jari M, Bagheri H, Hassani MR. The effect of aerobic exercise program on quality of life in schizophrenic patients. Journal of Shahrekord Uuniversity of Medical Sciences. 2007;9. [Persian]

27. Hosseini E, Farzan F. An Examination of the role of social support in women's sport

Commitment to Sports. 2016;10(1):137-148. [Persian]

28. Chavoshian SA, Moeini B, Bashirian S, Feradmal J. The role of spiritual health and social support in predicting nurses' quality of life. Journal of Education and Community Health. 2015;2(1):19-28.

29. Haghighatian M. The effective factors on the quality of women's life in Isfahan. Journal of Iranian Social Development Studies. 2014;6(2):81-89. [Persian]

30. Hashemi Z, Keikha M, Keikhaee R, Ansari Moghadam A, Salehi Marzijarani M, Nasiri A. Is women's Employment in Health Centers Associated With their Quality of life? A Case study of employed women in Zabol, Iran in 2010. Iranian Journal of epidemiology. 2013;9(2):15-21. [Persian]