TECHNIUM
SOCIAL SCIENCES JOURNAL

Vol. 20, 2021

A new decade for social changes

www.techniumscience.com

ISSN 2668-7798

9 772668 779000

Investigating the Relationship between Mental Health and Perceived Social Support in the Elderly referred to selected hospitals of Shahid Beheshti University of Medical Sciences in Tehran

Fatemeh Paknejad¹, Manijeh Naderi², Jamileh Mohtashami³

¹M.Sc. Student, Student Research Committee, Department of Mental Health Nursing, School of Nursing and Midwifery, Shahid Beheshti University of Medical Sciences, Tehran, ²Instructor, Department of Mental Health Nursing, School of Nursing and Midwifery, Shahid Beheshti University of Medical Sciences, Tehran, ³Associate Professor, Department of Mental Health Nursing, School of Nursing and Midwifery, Shahid Beheshti University of Medical Sciences, Tehran

paknezhad.f71@gmail.com¹, manigeh.naderi@gmail.com²,
j_mohtashami@sbmu.ac.ir³

Abstract. Introduction: Most elderly people are at risk of chronic diseases and their complications and problems and inadequate social support, especially among low-income groups, can affect their lives. The aim of this study was to investigate the relationship between mental health and perceived social support in the elderly referred to selected hospitals of Shahid Beheshti University of Medical Sciences in Tehran. **Method:** This study is a descriptive-correlational research that was performed in selected hospitals affiliated to Shahid Beheshti University of Medical Sciences in Tehran. The samples were the elderly referred to the mentioned hospitals who were included in the study by available sampling method and based on the inclusion and exclusion criteria from the study population. Data were collected through the "General Health Questionnaire"(GHQ-28) and the "Zimet Perceived Social Support Multidimensional Scale" and data analyzed using SPSS statistical package version 20. **Results:** The results showed that the mean of general health was 37.64(social dysfunction with an average of 10.30±4.24 and physical problems with an average of 10.23±4.54 were the most common psychological problems in the elderly)and perceived social support was 54.56, which indicates that the elderly have moderate mental health and perception of social support. Findings also indicated that there is an inverse and significant relationship between mental health and perceived social support of the elderly ($r = 0.624$). In other words, the lower a person's perception of social support is associated with the greater risk to their mental health. **Conclusions:** The results showed that social dysfunction and physical problems(two subscales of general health) had been the most common psychological problems in the elderly. In addition, perceived social support from family, friends, and others in the elderly has been moderate. Therefore, the mental health of the elderly should be considered and awareness of families and other people involved with the elderly should be given priority for stronger emotional ties with the elderly and increase of social support.

Keywords. Mental health, Perceived social support, the Elderly

Introduction

Most elder people are at risk for chronic diseases and their complications and experience difficult lives due to problems and inadequate social support, especially among the low-income groups. Given that the elderly have many health problems and are the main consumers of health services, this issue has received much attention in the health care system (1). Of course, one of the most important issues in the health care profession is the care of the elderly, the manner and quality of care provided to this part of society. In addition, nurses have the task of recognizing the spiritual dimensions, physical needs and helping to provide a suitable environment for them so that they can feel safe in society (2). According to US statistics, the number of people reaching the age of 80 is currently 137 million, which will reach 452 million by 2050 (3). Today, the increase in the elderly population is a global phenomenon that has become a crisis, so that the population of people over 65 in the world is more than the growth of the child population (4). Iran is not immune to these demographic changes, and after experiencing the epidemiological changes of diseases, it must prepare for the management of the aging wave in the next few decades. According to the census of the Statistics Center of Iran and studies, the population over the age of 65 in Iran in 2021 will be estimated more than 10%, which seems to exceed 20% by 2050 (5). According to the 2011 census, more than 6 million (8.2%) of the population of Iran are people aged 65 and older (6). As we get old, our mental capacity is naturally decreased and the elderly are exposed to a variety of physical and mental illnesses (7). In old age, decrease of function and the emergence of various diseases cause many physical and mental illnesses. Some studies have shown that the onset of physical illness is inversely related to mental health. What is lacking in all areas of the country is the neglect to the psychological and social dimensions of the health of the elderly as a vulnerable group. In this regard, it should be noted that the elderly are facing some events such as the end of employment and retirement, feelings of loneliness, rejection and also the psychological stress of industrialization of societies that lead to emotional and psychological separation. (8)

Aging raises the need to pay attention to perceived social support as an effective factor in promoting the physical and mental health of the elderly and as a precondition factor for successful aging (9). Perceived social support, due to changes of aging, plays a vital role in the lives of the elderly, and as people get older, its importance increases tremendously (10). The key point here is that perceived social support is a factor that can be potentially increased by implementing some planned interventions (9). The increase of life years in the present age and the growing trend of the elderly population, has made the need to pay attention to various types of social support in increasing the mental health of the elderly more than ever (6). Health is perhaps the only dimension of human beings that leads to a feeling of happiness, and in addition to promoting (physical, mental) health, it has significant economic effects. On the one hand, it reduces the costs of treating diseases and on the other hand, it increases the efficiency of the activities of individuals in the community (4). Considering the importance of aging period and increase of the elderly, the number of studies on the seniors, especially in the field of mental health and social support, is very low. Therefore, the present study aimed to investigate the mental health status and perceived social support of the elderly.

Materials and Method

In this descriptive-correlational study, the relationship between perceived social support and mental health of the elderly referred to selected hospitals affiliated to Shahid Beheshti University of Medical Sciences in Tehran was investigated. Research samples were selected based on inclusion criteria including age over 60 years; No disturbance in the level of consciousness; Lack of certain diseases such as cancer, Patients with colostomy; No speech or

hearing disorders; And consent of participating in the study. Also, if the patient did not cooperate during the interview and didn't fill out a written questionnaire due to aggravation of his health problems or unwillingness to continue to participate in the study, they could leave the study at any time. A total of 260 subjects were included in the study through available sampling. Data collection tools include 3 sections of demographic information (age, gender, religion, marital status, housing status, education, occupation, economic status), Goldberg General Health Questionnaire (GHQ-28) and Zimet Multidimensional Perceived Social Support Scale.

The General Health Questionnaire (GHQ-28) that designed by Goldberg is one of the most well-known mental health screening tools available in forms 12, 28, 30 and 60 questions. In this study, its 28-question form was used, the questions of which included four subscales and each of them included 7 questions. Questions 1-7 are related to the subscale of physical symptoms and general health status; questions 8-14 are related to the anxiety subscale; questions 15 to 21 are related to the social dysfunction subscale; questions 22-28 are also relate to the depression sunscale. There are two types of scoring methods for this questionnaire. It is a traditional method that the options are scored (1-1-0-0) and the maximum score of the person will be 28. Another scoring method is the Likert method, in which the options are scored as -0) (3-2-1. The maximum score of the subject with this method in the mentioned questionnaire will be 84 (11) (12). The higher the overall score and above the cut-off point (i.e., 24 or higher), the worse the person's general health, and the lower the overall score and below the cut-off point, the more healthy he is. In the present study, the Likert method was used. The mental health validity of GHQ has been evaluated by Alavi et al. in 2015 (quoted by Noorbala et al.) (13) and Yousefi Saeed Abadi et al. in 2018 (14).

Zimet's Multidimensional Scale of Perceived Social Support was developed in 1988 by Zimet, Dahlem, Zimet & Farley (Zimet, Dahlem, Zimet & Farley, 1988). The Multidimensional Perceived Social Support Scale (MSPSS) is a 12-item tool designed to assess perceived social support from three subscales of friends: questions (6, 7, 9, 12); family: questions (3, 4, 8, 11); and significant others: questions (1, 2, 5, 10). The multidimensional scale of perceived social support of Zimet et al. is considered as a 7-point Likert scale from strongly disagree (with a score of 1) to strongly agree (score of 7). Therefore, the subject in each question of this scale receives a score of 1 to 7. In other words, the total score for each subscale ranges from 4 to 28 and for the whole scale from 12 to 84 (15). The Zimet's 12-item perceived social support questionnaire was re-validated by Molavi (16). In this study, to determine the reliability of the questionnaires, the internal consistency method and Cronbach's alpha calculation were used with the cooperation of 15 eligible individuals in the study who were not included in the main study later. Cronbach's alpha coefficients of the Goldberg General Health Questionnaire were 0.951 and the perceived social support of Zimet was 0.836, which indicates the appropriate coherence of the questionnaire questions. After approving the ethic committee (code: 1398.203) from Shahid Beheshti University of Medical Sciences, sampling was started from selected wards affiliated to the University of Medical Sciences Shahid Beheshti referred to Tehran (Imam Hossein, Taleghani, Martyrs of Tajrish, Modarres, Loghman). Data collection was done in the morning, evening and night shifts, and individuals were given the opportunity to complete the questionnaires. The majority of the questionnaires were completed by the researcher based on samples told. The objectives of the research and how to do it were explained to the participants and the individuals had free will to response the questions and their data and information were kept confidential and anonymous, and they were assured that they would be provided with the results of the research if they wished. After data collection finished, data analyzed using SPSS statistical package version 20.

Results

The present study was performed among 260 elderly people referred to selected hospitals of Shahid Beheshti University of Medical Sciences in Tehran, in which there were 125 (48.1%) elderly women and 135 (51.9%) men with a mean age of 6.56 ± 71.07 years old. In addition, the results showed that 6.5% of the elderly were single, 55.8% were married, 30.4% were widowed and 7.3% were divorced, and more than 50% of them had less than a diploma. More than 90% of the elderly studied had the religion of Islam, 73.8% of which were Shiites, 15% were Sunnis, others were Christians, 2.7% were Orthodox and 1.5% were Catholics. The results of determining the average mental health of the elderly and each of its dimensions including physical problems, anxiety and sleep disorders, social dysfunction, depression (Table 1) show that social dysfunction with an average of 10.30 ± 4.24 and physical problems with an average of 10.23 ± 4.54 had been the most common mental problems in the elderly. In general, the total score of mental health of the elderly was 37.64 ± 15.25 ; which was lower than the average total score of 42.

Table 1. Determining the average mental health and its dimensions in the elderly

Mental health and its dimensions	the lowest	the highest	mean	standard deviation
Physical problems	0	20	23.10	54.4
Anxiety and Sleep Disorder	0	21	79.9	21.4
Social dysfunction	1	21	30.10	24.4
Depression	0	21	39.7	41.5
Total score of mental health	8	76	64.37	25.15

The results of determining the average perceived social support and each of its dimensions including family, friends and others (Table 2) show that the perceived social support from family is 19.19 ± 6.19 , from friends 83.5 ± 30.16 and from other people was 19.07 ± 6.23 and in general, the total score of perceived social support of these elderly was 54.56 ± 14.75 .

Table 2. Determining the average perceived social support and its dimensions in the elderly

Perceived social support and its dimensions	the lowest	the highest	mean	standard deviation
Family	4	28	19.19	19.6
Friends	4	28	30.16	83.5
Others	4	28	07.19	23.6
Total score of social support	12	84	56.54	75.14

Kolmogorov-Smirnov test was used to check the normality of the data, which is normal based on the results of the distribution test of the statistical population, and Pearson correlation test was used to check the correlation between the variables. Also, the results of evaluating the relationship between mental health and each of its dimensions with perceived social support and each of its dimensions (Table 3) show that the total score of mental health with the total

score of perceived social support by the elderly had a correlation coefficient of -0.624 and was significant. In other words, the lower a person's perception of social support, the greater the risk to their mental health. A detailed study of each of the dimensions of mental health and the dimensions of perceived social support by the elderly has also confirmed this result. In fact, the less support the elderly receive from family, friends, or others, the more physical, mental, and psychological problems they will have.

Table 3. Determining the relationship between mental health and its dimensions with perceived social support and its dimensions in the elderly

Social support / Mental health		Family	friends	others	Total score of social support
Physical problems	r	308.-0	355.-0	319.-0	404.-0
	P value	001.<0	001.<0	001.<0	001.<0
Anxiety and sleep disorder	r	431.-0	348.-0	412.-0	492.-0
	P value	001.<0	001.<0	001.<0	001.<0
Social dysfunction	r	343.-0	505.-0	311.-0	475.-0
	P value	001.<0	001.<0	001.<0	001.<0
Depression	r	555.-0	477.-0	585.-0	668.-0
	P value	001.<0	001.<0	001.<0	001.<0
Total score of mental health	r	503.-0	506.-0	502.-0	624.-0
	P value	001.<0	001.<0	001.<0	001.<0

Examining the relationship between each of the two variables of mental health and perceived social support by the elderly with the underlying variable of age (Table 4), ANOVA test results showed that the mean of mental health and perceived social support by different age groups had no significant difference with each other. ($P > 0.05$).

Table 4. Determining the average mental health and perceived social support by age group of the elderly

Variables	Age group	Number	mean	standard deviation	Significance level
Mental health	65-75	156	84.36	28.15	504.0
	75-85	74	86.38	59.14	
	More than 85	30	88.39	42.17	
Social support	75-65	156	63.55	82.14	303.0
	75-85	74	77.51	59.14	
	More than 85	30	69.53	18.13	

Discussion

The aim of this study was to investigate the relationship between mental health and perceived social support in the elderly referred to selected hospitals of Shahid Beheshti University of Medical Sciences in Tehran. In the present study, the mean of mental health and its dimensions (physical problems, anxiety and sleep disorders, social dysfunction, and depression) were studied in the elderly and the results showed that social dysfunction with an average of 10.30 ± 4.24 and physical problems with an average of 10.23 ± 4.54 were the most common psychological problems in the elderly. In general, the total score of mental health of the elderly was 37.64 ± 15.25 ; which was lower than the average total score of 42, which indicates the average level of health of the studied elderly and its non-risk. But the results of the study of Nabavi et al. (2014) and Nakano (2014) show the appropriate state of mental health in the studied elderly (17) (18). On the other hand, the results of the study of Barati et al. (2012) in the study of the general mental health status of the elderly in Hamadan showed that considering the cut point (score 23) of the mental health questionnaire, 42% of the elderly are suspected of mental disorders and they do not have good mental health, which is contrary to the results of the present study (19). The reason for this discrepancy can be attributed to the differences in the statistical communities and the climatic and cultural conditions and the time period of the research of the two studied communities. Also in line with the results of the present study, the results of research by Barati et al. (2012) and Pasha et al. (2007) on the elderly of Ahvaz showed that social dysfunction had the greatest impact on the incidence of mental disorders (19) (20). Also, Mortazavi et al. (2011) in the study of mental health of the elderly in Shahrekord and its relationship with demographic and social factors found that 56.8% of the studied elderly were suspected of general mental health disorders; 53.5% were anxiety, 53% were physical problems, 45% were depression and 37.8% were social dysfunction (21). The authors of this article believe that increasing human life expectancy and increasing the population of the elderly is one of the achievements of recent centuries, and therefore understanding the evolution process and problems of this period can largely prevent the disabilities of this vulnerable segment of society. One of the most important mental health problems of the elderly is physical problems and social dysfunction because during this period, their strength and physical health are decreased. Various physical illnesses affect their quality of life, and with retirement, their relationship with relatives and friends is diminished over time. Along with these injuries, they suffer from a decline in social status. The results of determining the average of perceived social support and each of its dimensions (family, friends and others) showed that perceived social support from family was 19.19 ± 6.19 , from friends 16.30 ± 5.83 and from other people were 19.07 ± 6.23 and in general the total score of perceived social support of these elderly was 54.56 ± 14.75 . Rashidi et al. (2014) in their study examined the status of social support subscales in the elderly in two sections: social support for the elderly living in a nursing home and the elderly living with their families, and the results showed that the average perceived social support of the elderly living in a nursing home from family 6.34 ± 1.46 , from friends 4.98 ± 2.08 and from other people 5.13 ± 1.07 and the average perceived social support of the elderly living with their family from family 1.27 ± 10.12 , from friends was 9.98 ± 0.9 and from other people was 8.78 ± 1.84 . In addition, the average total social support was 16.44 ± 4.47 for the elderly living in a nursing home and 28.89 ± 2.14 for the elderly living with the family. It seems that according to cultural teachings, the intimate atmosphere of Iranian families is a valuable resource for supporting the elderly and can be effective in improving the quality of life of the elderly. Also, the results of evaluating the relationship between mental health and each of its dimensions (physical problems, anxiety and sleep disorders, social dysfunction,

depression) with perceived social support and its dimensions (family, friends and others) showed that the total score of mental health with the total score of social support perceived by the elderly had an inverse and significant correlation coefficient of -0.624. In other words, the lower a person's perception of social support is associated with the greater risk to their mental health. In fact, the less support an elderly person receives from family, friends, or others, the more physical, mental, and psychological problems they will have. In this regard, Moatamedy et al. (2017) in predicting psychological well-being of the elderly based on the ability to manage stress and social support concluded that social support can predict psychological well-being (23). In addition, the results of the study of Nabavi et al. (2014) and Wong et al. (2014) in examining the relationship between social support and mental health in the elderly showed that increasing social support of the elderly can have a significant impact on their mental health (17) (24). Esgalhado et al. (2010) also found in a study that the more people perceive high social support, the higher the level of psychological well-being and mental health (25).

From the authors' point of view, social support does not only mean the number of social relations, but also the quality of these relations. Interpersonal connections can promote health. These bonds make a person less vulnerable to stress and less vulnerable to disease.

Conclusion

The results of the present study showed that social dysfunction and physical problems were the most common psychological problems in the elderly. In general, the average score of mental health problems in the elderly was higher than the cut-off point (i.e. equal to 24 and above) and indicates that the elderly are at risk of mental health problems. In addition, perceived social support from family, friends, and others in the elderly has been moderate. The relationship between the total score of mental health and the total score of social support perceived by the elderly was inverse and significant. In other words, the lower a person's perception of social support means the greater the risk to their mental health. Therefore, it is suggested that families and other individuals involved with the elderly be aware of the need for stronger emotional bonds with the elderly and increased social support. It is also best to encourage older people to volunteer for associations and institutions to meet their emotional and other needs, in which nurses play a key role. On the other hand, informing the institutions and organizations in charge of the elderly, such as the Health and Aging Population Commission of the Ministry of Health, Medical Education and Treatment, Pension Centers, etc. seems necessary to pay more attention to the social needs of the elderly to improve general health of the elderly and to empower them in order to have a productive and positive aging period.

Acknowledgments

This article is the result of a master's thesis in Mental Nursing at the School of Nursing and Midwifery, Shahid Beheshti University of Medical Sciences. The authors of this article express their gratitude to the Vice Chancellor for Research of the University for approving the plan and also to all the staff and nurses working and elderly in the hospitals affiliated to Shahid Beheshti University of Medical Sciences for their sincere cooperation. The authors reject any conflict of interest.

References

1. Hossini A. The Role of Social Support on Quality of life Elderly People in Mashhad, Thesis for a master's degree orientation Social Science Research, Mashhad Ferdowsi University; 2014.

2. Dong X, Simon MA. Is greater social support a protective factor against elder mistreatment? *Gerontology*. 2008;54(6):381-8.
3. Akha AAS. Aging and the immune system: An overview. *Journal of immunological methods*. 2018;463:21-6.
4. Ghamari S, MSC. The Effect of Self-care Education with Salutogenic Approach on the Feeling of Interaction and Self-efficacy in the Elderly by Referring to the Day Care Center and Education of the Elderly in Mashhad Neshat: School of Nursing and Midwifery, Shahid Beheshti University of Medical Sciences; 2014.
5. Dadgaran a, Genaati m. Implementing and Evaluating Community Education by Service Learning: Simultaneous Learning with Service at an Elderly Center. *Research in medical science education*. 2012;4(2):9-16.
6. Nabavi h, Alipuor f, H|ejazi a, Rabani z, Rashedi v. The Relationship between Social Support and Mental Health in the Elderly. *Journal of Mashhad University of Medical Sciences*. 2014;57(7):841-6.
7. Fani M. Aging and mental health. *Journal of Research on Religion and Health*. 2016;2(3):1-3.
8. Hemmati r, Rahimi Ali Abadi a. The Study of the Relationship between Social Support and Mental Health (Case Study of Khalkhal Women). 2012:105-19.
9. Nazari S, Foroughan M, Mohammadi Shahabolaghi F, Rassouli M, Sadegh Moghadam L, Farhadi A, et al. Analysis of the Psychometric Properties of the Perceived Social Support Scales in Older Adults. *University of Social Welfare and Rehabilitation Sciences*. 2016;10.
10. Sood S, Bakhshi A. Perceived social support and psychological well-being of aged Kashmiri migrants. *Research on Humanities and Social Sciences*. 2012;2:1-7.
11. Goldberg DP, Gater R, Sartorius N, Ustun TB, Piccinelli M, Gureje O, et al. The Validity of Two Versions of the GHQ in the WHO Study of Mental Illness in General Health Care. *Psychological medicine*. 1979;27:191-7.
12. Rajaie M. Predicting Mental Health in Elderly Above the Age of 65 Based on McKinlay,s Spiritual Model of Aging 2011.
13. Alavi M, Jorjoran Shushtari Z, Noroozi M, Mohammadi Shahboulaghi F. Mental Health and Related Factors in Old Population in Tehran 2014-2015. *J Mazandaran Univ Med Sci*. 2018;27(158):162-70.
14. Yusefi R, Gholafshani A, Bahootarudi T. Investigating the relationship between emotional intelligence and mental health of education staff in District 2 of Sari. *Journal of Process Review*. 2018;5(11):95-80.
15. Zimet GD, Dahlem NW, Zimet SG, Farley GK. The multidimensional scale of perceived social support. *Journal of personality assessment*. 1988;52(1):30-41.
16. Molavi S. Investigation of Cognitive- Behavioral and Interpersonal Therapists in Reducing Postpartum Depression, and Increasing Marital Satisfaction and Precieved Social Support in Women with Postpartum Depression in one Offices obstraction in Ahvaz city. MSN, Shahid Chamran University of Ahvaz University Campus. 2015.
17. Nabavi H, Alipur F, Hejazi A, Rabani Z, Rashidi V. The Relationship between Social Support and Mental Health in the Elderly. *Journal of Mashhad University of Medical Sciences*. 2014;57(7):841-6.
18. Nakano A. The Relationship Between Mental Health and Self-Rated Health in Older Adults. Japan: Kobe University. 2014.

19. Barati MPD, student Y, Fathi MS, A.R. Soltanian ARPD, Moeini BPD. Mental Health Condition and Health Promoting Behaviors among Elders in Hamadan. *Avicenna J Nurs Midwifery care*. 2012;20(3):12-22.
20. Pasha G, Safarzadeh S, Mshak R. Comparison of public health and social support for the elderly in public homes and nursing homes. 2008;3:503-9.
21. Mortazavi S, EftekharaArdebili H, Mohamad K, Doralibeni R. Assessing the mental health status of elderly in Shahrekord and relationship with sociodemographic factors. *Payesh*. 2011;10(4):485-92.
22. Rashedi V, Gharib M, Yazdani AA, Social Participation and Mental Health among Older Adults in Iran, *Iranian Rehabilitation Journal*, 2014, 12(1):9-13.
23. Moatamedy A, Borjali A, Sadeqqur M. Prediction of Psychological Well-Being of the Elderly Based on the Power of Stress Management and Social Support. *Salmand: Iranian Journal of Ageing*. 2018;13(1):98-109.
24. Wong ST WA, Gregorich S, Pérez-Stable EJ. What Type of Social Support Influences Self-Reported Physical and Mental Health Among Older Women? *Aging Health*. 2014;26(4):663-78.
25. Esgalhado MG RM, Pereira H, Afonso RM. Influence of social support on the psychological well-being and mental health of older adults living in assisted-living residences. *International Journal of Developmental and Educational Psychology*. 2010(1):1.