



## Investigating the effect of mindfulness on the social health of the elderly referred to Shahrekord health centers in 2021

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### Abstract

**Introduction:** Today, many researchers believe that not only social health cannot be separated from other dimensions of health, but also the importance of that in physical and mental health is quite obvious. In addition, the global population aging crisis doubles the importance of studies in the Elderly field. Therefore, this article aimed to investigate the effect of mindfulness on the social health of the elderly referred to Shahre-Kord health centers in 2021.

**Method:** This quasi-experimental study with the pre-test-post-test design was performed on 30 elderly people aged 60-70 years referred to Shahrekord health centers. Simple random sampling and data collection tools were the Keys Social Health Questionnaire. Data analysis was performed at descriptive and inferential levels using SPSS software. The significance level was considered  $p < 0.05$ .

**Results:** Participants' mean age was about  $62.83 \pm 2.23$  years, and the highest frequency of education level was related to diploma and post-diploma education. Also, 93.3% of the samples get paid more than ten million rials, and in terms of location, most people lived in the city center. The results of this study showed that the average score of elderly social health after using mindfulness education has increased significantly.

**Conclusion:** Mindfulness-based intervention can be suggested as an effective method in order to promote the social health of the elderly and ultimately their quality of life.

**Keywords:** elderly, mindfulness, social health

### Introduction

Health is a complex, multidimensional concept and a major right of all human beings who must have access to the basic resources for its provision. According to the definition of the World Health Organization, nowadays health is no longer just about not being sick, but it is also important to pay attention to daily functioning when evaluating health. The definition of health provided by this

organization is "complete physical, mental and social well-being, not only not being sick or disabled." (1, 2)

One of the dimensions of health in this definition is social health. Block and Breslow first defined the concept of social health in 1972, as the level of a member's functioning. Then, in 1987, this concept was proposed with the argument that health is



beyond the reporting of disease symptoms, the extent of diseases, and individual functional capabilities. Social health was defined, both as part of the pillars of health status and as a function of it by Donald et al. (3). In fact, social health is called the ability of a person to perform his activities and social roles in the best way and to feel connected with the society, which is the main and essential part of social health (4).

Keyes, as one of the experts in this field, believes that a person who benefits from social health has a purpose in his life and sees himself in control of it. They are not only constantly seeking personal growth and development, but they also consider the society capable and its growth and development as a cause of their own progress. Despite all the positive and negative aspects, they respect the society and they consider themselves as a part of it. (5) Today, the emphasis of the World Health Organization on social health has caused the common concern of sociologists and social planners, health experts, and policymakers in different societies. (6) The importance of this aspect of health is such that not only the people who have it, can more successfully deal with the problems caused by playing the main social roles, but the development of the society also depends on its comprehensive coverage in the society. (7)

On the other hand, the world is getting old. Epidemiological studies show that 11% of the world's population is made up of people over 60 years old, which will reach 22% of the world's population by 2050. (8) Meanwhile, in our country, the elderly make up a significant percentage of the population. (9)

Although longevity is considered an incredibly valuable resource, it provides an opportunity for people to re-examine not only how they experience older age, but also the formation and development of their entire lives. For example, in high-income

countries, there is evidence that many people are rethinking their unchanging beliefs about the nature of old age and even seeking to spend these extra years in the most creative ways, such as new jobs and continuing education. But this global population aging will have different problems and consequences for underdeveloped, developing and developed countries. (10, 11)

Despite the differences in the definition of old age due to the increase in life expectancy, quality of life and performance level of the elderly population, most countries define the elderly population as people over 60-65 years of age and more. (12) Old age is associated with several psycho-social risk factors such as retirement and lack of social roles, fading sense of independence, emotional and psychological separation, changes in family structure and traditions, death of friends and relatives, and sometimes feelings of loneliness and rejection. Depression causes people to be exposed to mental and emotional problems. These factors show the need to pay more attention to this group of society, more extensive studies, and private policy making and planning in this field (13, 14).

The introduction of the years 2021-2030 by the United Nations as the decade of aging leads research to the needs and gaps for the elderly and future challenges and paves the way to healthy aging. In this regard, one of the areas determined by the World Health Organization to realize the decade of old age is to strengthen the abilities of the elderly in societies, where mental and social health is considered as one of the factors affecting it (15, 16).

Today, psychological-behavioral treatments such as mindfulness have a special place in increasing a person's skills to relieve pain and face stressful situations and emotions. (15) These treatments have attracted great interest in various cultures and a significant range of related resources are available to

the public (17). Mindfulness is becoming a widespread approach to improving psychological well-being worldwide, which involves developing the ability to intentionally focus one's attention on one's current experience without reacting or interpreting it. (18) Mindfulness is defined as paying intentional, non-judgmental, moment-to-moment attention to the unfolding of moment-to-moment experiences. In simple words, it means being aware of thoughts, behavior, emotions, and feelings, and it is considered a special form of attention in which the two basic elements of being in the present and not judging are of high value. These two basic elements play the main role in events, actions, and reactions. In other words, the ability to accurately identify one's emotions and to be aware of them when they are produced, as well as to control one's tendencies in the way one reacts to different situations and people, is called mindfulness (19, 20). This type of attention increases awareness, transparency, and acceptance of the present reality, not the past or the future. Being present in the present makes one see reality with all its internal and external aspects and realize that the mind is in the process of intellectual division and internal dialogue due to constant judgments and interpretations (21). Mindfulness is essentially an adaptive psychological process to achieve effective self-regulation and stress reduction. Such awareness includes feelings, bodily states, thoughts, and awareness of the individual, as well as encouraging openness and acceptance (19). One of the reasons that these methods are so important for mental health can be their versatility and wide application. Mindfulness appears to be applicable in a wide range of situations and contexts. The second reason may be diversity: new and valid treatment methods can be effective in patients who do not respond to prescribed treatments. A third reason may be interest among patients, which increases the likelihood of their participation and adherence (18).

Contrary to extensive planning in the fields related to people's physical health, the lack of social health

promotion programs for the elderly is noticeable and significant. Considering the widespread use of mindfulness techniques at present, this study was conducted with the aim of the impact of mindfulness on the social health of the elderly and to pave the way to improve the social health of the elderly (16, 15).

### Method

This study is a semi-experimental type with a pre-test-post-test design and is taken from the master's thesis of community health nursing with the title "Comparison of the impact of education based on mindfulness and the application of the health belief model on the resilience and social health of the elderly who refer to the Selected Health centers of Shahrekord city in the year 2021" with code of ethics IR.IAU.YAZD.REC.1399.047.

The statistical population of this research included all the elderly 60-70 years old who were referred to the health centers of Shahrekord city in 2021 and were sampled by a simple random method. The sample size was 30 people according to similar studies (23, 24). Criteria for entering the research were: having a health file registered in the Sib integrated system (electronic health file) (25), being 60-70 years old, declaring consent to participate in meetings, having cognitive, speech, visual and auditory abilities and the ability to perform daily activities, and having a minimum education of middle school degree. The criteria for leaving the research include participating in psychotherapy, meditation and mindfulness courses at the same time as the study or before this study, suffering from a serious physical or psychological illness, not being able to do homework, not attending training sessions, and willingness to continue attending the meetings.

Keyes Social Health Questionnaire was used to collect data. which is prepared based on his theoretical model of social well-being structure and has 20 items and examines five components of

social health including social cohesion, social acceptance, social participation, social prosperity, and social solidarity. The scoring of this tool is based on a five-point Likert scale, "Totally agree=5", "Agree=4", "I have no opinion=3", "Disagree=2", "Totally disagree=1". The validity of the questionnaire was obtained by its creators more than 0.70 and in Iran 0.71. Cronbach's alpha reliability coefficient obtained for the whole scale is 78% (26).

In order to conduct this research, sampling was done through the Sib system of all health centers in Shahrekord. In this way, among the service recipients of each center, 60-70 year olds were searched, and the health care workers were asked to choose 5 numbers. After The name, surnames, and phone numbers of the selected people were noted

down, he called the people in the same center and after introducing and explaining the purpose and method of conducting the research and reassuring them that whenever they did not want to continue the cooperation, they could withdraw from the study and their information is completely confidential and will be used without mentioning their names, the individuals were asked about their willingness to participate in this study. In case of their unwillingness, the health care workers were again asked to choose some numbers. Finally, taking into account the possibility of dropout in the samples, 35 people from 7 health centers were selected as the research sample. The pre-test was taken from the participants by phone, and five group sessions were arranged during 8 weekly sessions. Mindfulness sessions lasted from the beginning of April 2021 until the end of June of the same year.

**Table 1:** Summary of the content of mindfulness sessions

|                                    |  |
|------------------------------------|--|
| First session                      | Welcome and introduction - introduction of mindfulness and its exercises - breathing exercise - eating raisins - sitting meditation - momentary mindfulness - home practice  |
| second session                     | Welcome - momentary awareness - weekly review - sitting meditation with awareness of breathing with the aim of expanding focus - practice listening, observing and naming - non-judgmental description - home practice   |
| third session                      | Welcome - momentary mindfulness - review of the week - energizing exercise - sitting meditation - breath counting - autopilot - using mindfulness in everyday life - home practice   |
| fourth Session                     | Automatic pilot in daily life - sitting meditation - non-reaction in daily life - leaf exercise in the river - short meditation - review of home exercises - momentary awareness and termination of the session - home practice  |
| fifth Session                      | Welcome - momentary awareness - review of the week - awareness of mind in the context of each person - tree meditation - stabilization (including 4 steps) - "There is..." exercise (awareness of thoughts) - home exercise  |
| The sixth session (body awareness) | Welcome - momentary mindfulness - review of the week - mindful movement (warming up - neck, shoulder, and upper body) - momentary mindfulness - home practice and end of the session   |
| The seventh session                | Welcome - Momentary Mindfulness - Review of last week - Visualizing and letting go - Mindful Listening - Heart Meditation - Momentary Mindfulness - Home practice - End of session   |
| The eighth session                 | Reviewing sessions - welcome - momentary mindfulness - review of last week's exercises - mindful walking - planning a program (choosing a pattern of exercises performed in these sessions) - successful failure (meaning of successful mindfulness) - keeping Breathing - eating (apple) consciously- home practice |

A summary of the content of the mindfulness sessions is given in Table No. 1. (27)

One month after the last session, the post-test was taken over the phone. In addition, in order to comply with ethical considerations, verbal consent was obtained from the participants, they could withdraw from the study at any time and for any reason and all ethical matters were observed in the publication of the research results.

Data analysis was done at two descriptive and inferential levels. At the descriptive level, mean values and standard deviation were used to describe the sample situation, and at the inferential level (since the study design is pre-test, post-test) to control the effect of the pre-test score, covariance analysis was used. Paired t-test was used to compare the difference between pre-test and post-test scores in each group. Before conducting the tests, the assumptions of the normality of the data were

checked and confirmed by the Shapiro-Wilk test. In addition, the assumption of homogeneity of the regression slope was also checked and confirmed. The significance level of the tests was considered as  $p < 0.05$ .

### Findings

In this study, 30 elderly people, 60-70 years old, referring to Shahrekord health centers, including 17 (56.7%) elderly women and 13 (43.3%) elderly men, were studied. The descriptive findings of this study showed that the elderly were in the age range of 60 to 68 years or the average age of  $62.83 \pm 2.23$  years. Regarding the level of education, the highest frequency observed (46.7%) was related to diploma and post-diploma education. Also, 28 people (93.3 percent) of the elderly had an income of more than one million Tomans. In terms of place of residence, 56.7% of the elderly lived in the city center. Table 2 shows the average score of social health and its dimensions before and after the intervention.

**Table 2:** Average score of social health and its different dimensions before and after mindfulness training

| Variable             |           | number | average      | standard deviation | t-statistic   | p-value         |
|----------------------|-----------|--------|--------------|--------------------|---------------|-----------------|
| Social flourishing   | Pre-test  | 30     | <b>9.83</b>  | <b>2.10</b>        | <b>-.542</b>  | <b>.592</b>     |
|                      | Post-test | 30     | <b>10.00</b> | <b>1.31</b>        |               |                 |
| Social adhesion      | Pre-test  | 30     | <b>10.73</b> | <b>1.98</b>        | <b>2.075</b>  | <b>.047</b>     |
|                      | Post-test | 30     | <b>10.20</b> | <b>1.86</b>        |               |                 |
| social solidarity    | Pre-test  | 30     | <b>13.27</b> | <b>2.07</b>        | <b>-3.568</b> | <b>.001</b>     |
|                      | Post-test | 30     | <b>14.37</b> | <b>1.13</b>        |               |                 |
| social acceptance    | Pre-test  | 30     | <b>12.60</b> | <b>2.06</b>        | <b>-2.525</b> | <b>.017</b>     |
|                      | Post-test | 30     | <b>13.27</b> | <b>1.89</b>        |               |                 |
| social participation | Pre-test  | 30     | <b>19.30</b> | <b>3.31</b>        | <b>-5.277</b> | <b>&lt;.001</b> |
|                      | Post-test | 30     | <b>21.67</b> | <b>1.97</b>        |               |                 |
| Social health        | Pre-test  | 30     | <b>65.73</b> | <b>5.01</b>        | <b>-5.161</b> | <b>&lt;.001</b> |
|                      | Post-test | 30     | <b>69.50</b> | <b>2.96</b>        |               |                 |

Based on the findings of Table 2, and according to the results of the paired t-test, the average social health score of the elderly after using mindfulness-based training, in the dimensions of social solidarity ( $p=0.001$ ), social acceptance ( $p=0.017$ ), Social participation ( $p < 0.001$ ), social health ( $p < 0.001$ ) increased in the elderly and was significantly higher

than the pre-test scores. Also, the social adhesion score ( $p=0.047$ ) decreased in the post-test compared to the pre-test. Based on the results of paired t-test, no significant difference was observed in social flourishing before and after mindfulness training ( $p=0.592$ ).

### Discussion and conclusion:

The present study was conducted with the aim of investigating the relationship between mindfulness and the social health of the elderly in Shahrekord city. The findings of this study showed that mindfulness training can be effective in improving the social health of the elderly. In addition, the scores of the dimensions of social solidarity, social acceptance, and social participation among the elderly have increased after the intervention compared to before. These results, with the study of Narimani et al. in 2015, in a study that examined the relationship between irrational beliefs, mindfulness, and cognitive fusion with social health among 112 elderly people in Ardabil with an average age of 66 years, showed that there is a significant relationship between mindfulness and social health(6). It was also compatible with the results of Norouzi et al.'s study, which showed the intervention based on acceptance and commitment by removing the person from the thinking cycle and focusing him on the social world and interpersonal relationships increases the health score (28).

Regarding the post-test score of the social flourishing dimension of the elderly compared to the pre-test, the results indicated that there was no significant difference after the intervention. In addition, the results show a decrease in adhesion score.

In explaining these findings about the dimensions of social solidarity, social acceptance, and social participation, it can be said that since mindfulness is a kind of art of living in the moment, and during meditation sessions, special skills such as positive confrontation with negative emotions, as well as a sense of acceptance, relaxation And people's curiosity is strengthened and creates a deep awareness and high sensitivity towards themselves, it can be effective in promoting social health, acceptance of oneself and other people in the

society, strengthening the individual's sense of control and cohesion, and people's sense of self-worth.

However, regarding the results obtained around other dimensions, it can be pointed out the significant contribution of other external factors such as social, political, health, etc. on the social health of people. For example, the impact of the current world conditions and the conflict of societies with the deadly corona disease, quarantine conditions, stress, the unavailability of hospital beds, the closure of a number of businesses or losses to businesses, unfavorable economic conditions, and a large number of factors, especially its social aspect, cannot be neglected. However, according to the results obtained in this study, the intervention based on mindfulness has been effective in promoting the social health of the elderly, and considering the growing population of the elderly and also the vulnerability of people in this period of life and the existence of the necessary potentials in The health and treatment system of the country can suggest this method as an effective intervention in improving the social health of the elderly and ultimately their quality of life.

Among the limitations of this research are online meetings and lack of face-to-face communication, the lack of possibility to enter the study for the elderly who did not have a case in health centers, and the significant and undeniable role of other social, economic, and political factors, etc. And also, the current conditions of the country in relation to the epidemic of Covid-19 and the weakening of social factors, on the social health and resilience of the elderly, can have a direct and deep impact on the state of their various aspects of health.

The significant weakness of this study was the absence of a control group because due to the conditions of the covid epidemic and the restrictions

imposed by the health centers, it was not possible to take more samples, and the pre-test that was taken before the intervention was considered as the control group. . It is suggested to repeat this research in a wider dimension and in different regions in order to increase generalizability.

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### Conflicts of interest

The authors declared that there is no conflict of interest.

### References

1. Telfer DJ, Sharpley R. *Tourism and development in the developing world*: Routledge; 2015.
2. Leonardi F. The definition of health: towards new perspectives. *International Journal of Health Services*. 2018;48(4):735-48.
3. Sayar S, Bababkhanian M. Comparing the Social Health Status among the Older People Living at Home and Those Living in Old People's Home. *Journal Of Isfahan Medical School*. 2016;34(400):1128-133.
4. Kyvanlo F, Binesh M, Nehardani H. Investigating the Role of Social Health Components in the Education Department of Sabzevar, Iran. *Journal of Sabzevar University of Medical Sciences*. 2016;23(3):438-43.
5. zahediasl m, pelhvari a. A meta-analysis of social health studies. *Social Development & Welfare Planning*. 2014;6(19):-.
6. Narimani M, Samadifard H. The Relationship between Irrational Beliefs, Mindfulness and Cognitive Fusion with Social Health among Elderly in Ardabil, 2016. *Journal Of Gerontology*. 2017;2(1):20-8.
7. Ganji M, Yadegari F. Factors Affecting Social Health among Citizens of Kashan. *Social Development & Welfare Planing*. 2020;10(40):147-75.
8. Kanasi E, Ayilavarapu S, Jones J. The aging population: demographics and the biology of aging. *Periodontology 2000*. 2016;72(1):13-8.
9. Rahimi AA, Ahmadi K, Asgharnejad AA. Indicators of aging mental health in Iranian culture. *The Women and Families Cultural-Educational Journal*. 2019;13(46):69-93.
10. Kumar A, Dixit V. Altruism, Happiness and Health among Elderly People. *Indian Journal of Gerontology*. 2017;31(4).
11. Beard JR, Officer A, De Carvalho IA, Sadana R, Pot AM, Michel J-P, et al. The World report on ageing and health: a policy framework for healthy ageing. *The lancet*. 2016;387(10033):2145-54.
12. Korkmaz Aslan G, Kartal A, Özen Çınar İ, Koştı N. The relationship between attitudes toward aging and health-promoting behaviours in older adults. *International journal of nursing practice*. 2017;23(6):e12594.
13. Zeinalhajlu AA, Amini A, Tabrizi JS. Consequences of Population Aging in Iran with Emphasis on its Increasing Challenges on the Health System (Literature Review). *Depiction of Health*. 2015;6(1):54-.
14. Rezapour A, Arabloo J, Alipour V, Alipour S. Investigation of the Effect of Aging on Health Costs: A Systematic Review. *Journal of Health Based Research*. 2020;5(4):411-22.
15. karimpoor b, abbasi r, marzieh k. Factors affecting health and social welfare in today's society. *Journal of Applied Studies in Social Sciences and Sociology*. 2018;1(2):49-.
16. Wielgosz J, Goldberg SB, Kral TR, Dunne JD, Davidson RJ. Mindfulness meditation and psychopathology. *Annual review of clinical psychology*. 2019;15:285-316.

17. Li SYH, Bressington D. The effects of mindfulness-based stress reduction on depression, anxiety, and stress in older adults: A systematic review and meta-analysis. *International journal of mental health nursing*. 2019;28(3):635-56.
18. Mousavi SA, Zare A, Moghaddam, Gomnam A, Bozorgi AM, Hasani F. Mindfulness from theory to therapy. *Rooyesh-e-Ravanshenasi*. 2019;8(1):155-70.
19. Kabat-Zinn J. *Mindfulness-based interventions in context: past, present, and future*. 2003.
20. Ghanbaritalab M, Javanmard G, Rezaei A. The relationship between Mindfulness and Attention with Academic Self-efficacy. *Rooyesh-e-Ravanshenasi Journal (RRJ)*. 2019;8(5):193-204.
21. Cacchione PZ. *World Health Organization Leads the 2021 to 2030-Decade of Healthy Ageing*. SAGE Publications Sage CA: Los Angeles, CA; 2022. p. 3-4.
22. Rowe JW, Jauregui JR. Healthy aging in the Americas. *Rev Panam Salud Publica*; 45, aug 2021. 2021.
23. Evazei S, Karami J, Hatamian P. The effectiveness of yoga-based mindfulness on anxiety reduction and resiliency promotion in middle-aged women Kermanshah city. *Iranian Journal of Nursing Research*. 2019;14(2):31-7.
24. Kabirinasab Y, Abdollahzadeh H. Effects of Training Mindfulness-Based Acceptance and Commitment on Cognitive Flexibility and Resilience of the Elderly in Behshahr City. *Advances in Cognitive Science*. 2018;19(4):20-.
25. Kabir MJ, Amiri HA, Rabiee SM, Keshavarzi A, Hosseini S, Shirvani SDN. Satisfaction of Urban Family Physicians and Health Care Providers in Fars and Mazandaran Provinces from Integrated Health System. *Journal of Health and Biomedical Informatics*. 2018;4(4):244-52.
26. Gerhard Zarbock , Siobhan Lynch , Axel Ammann , Ringer S. *Mindfulness for Therapists: arjmand publication*; 1399.
27. Noruzi A, Moradi A, Zamani K, Hasani J. Comparison of the effectiveness of LogoTherapy Based on Rumi's Thoughts with Acceptance and Commitment Therapy on the Autobiographical Memory of the elderly. *Journal of Cognitive Psycholog*. 2019;7(2):33-50.