

Study of Lifestyle and Its Relationship Between Health Literacy in Health Ambassadors in Urmia

ABSTRACT

Background and Objective: Health-promoting lifestyle is a valuable factor in improving quality of life. In the care system, health ambassadors have an undeniable role in the development of health behaviors in the community. This study was conducted to investigate lifestyle and the relationship between health literacy in health ambassadors in Urmia.

Materials and Methods: In this cross-sectional study in 2019, 200 ambassadors were selected using cluster random sampling. Data collection tools were a questionnaire including demographic characteristics, Lifestyle Questionnaire (LSQ), and Health Literacy Questionnaire (HELIA). Data were entered into SPSS software version 20 and analyzed by descriptive statistics, analysis of variance, and Spearman correlation coefficient.

Results: The results of this study showed that the lifestyle of health ambassadors was 13.5% at the poor level, 60.4% at the moderate level, and 26.1% at the good level. Lifestyle was also significantly associated with variables of gender ($p=0.01$), marital status ($p=0.02$) and occupation ($p=0.008$). The results of Spearman correlation showed that lifestyle with all its sub-domains had a positive and significant correlation with ($p < 0.001$) health literacy.

Conclusion: Given the importance of lifestyle in health ambassadors, it seems that educational programs to increase health literacy can be effective in improving the lifestyle among health ambassadors.

Paper Type: Research Article

Keywords: lifestyle, health, literacy, ambassadors

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Introduction

At present, the epidemiology of diseases has changed compared to the past, and non-communicable diseases, which are caused by several factors, are increasing (1). These diseases are not only affected by unchangeable factors such as age, sex, and family history, but also lifestyle play an important role in their occurrence (2). More than 70% of these diseases are related to people's lifestyles (3)

Lifestyle is a way of life that protects and promotes the health of people. The World Health Organization (WHO) reported, in a statement at the First World Conference on Healthy Living in Moscow, 60% of global deaths, as well as 80% of deaths in developing countries, are due to unhealthy lifestyles. This figure will reach 75% of global mortality by 2030. During the 20th and 21st centuries, a healthy lifestyle is considered an important and very important strategy for the prevention of chronic diseases (4, 5)

According to reports collected by the Statistics Center of Iran in 1390, out of about 380,000 deaths, at least 180,000 cases to the seven main sources of death (smoking, unhealthy nutrition, sedentary lifestyle, obesity, hypertension, hyperglycemia, and high cholesterol) are related to life-style. Continuing this trend, by 1404, about 70% of the country's diseases are attributed to non-communicable diseases and the rest to accidents and infectious diseases such as AIDS (6).

On the other hand, inappropriate lifestyle is one of the effective factors in the incidence of mental illness and chronic cardiovascular disease, diabetes, osteoporosis, various types of cancer, pulmonary obstruction, liver cirrhosis, gastric ulcer, AIDS, and many health problems such as obesity and addiction. Therefore, lifestyle plays a role in the exacerbation or persistence of diseases. Other consequences include:

feelings of emptiness and dissatisfaction with life, decreased life expectancy, poor quality of life and increased burden of health care in the field of manpower treatment, and rehabilitation (4, 7). As a result, modern health care has gradually shifted, its focus from examining mortality as a health consequence to broader areas such as health promotion, lifestyle, and quality of life, to the point where lifestyle promotion is one of the important targets in the present century (8)

In this regard, in order to promote health concepts, develop healthy behaviors, empower and sensitize the community to maintain their health, and the health of the community, the use of volunteer groups such as health ambassadors is necessary (9). The health ambassador is a member of the family who has at least 8 literacy classes and is voluntarily responsible for transmitting information learned in the field of health and takes active care of her/his health, family members and the community (10).

The health ambassador is one of the most important links in primary health care networks to provide education to the community. They are in the community and can easily convey health messages at home by constantly contacting other family members. They can also play a role as a model in creating the right lifestyle culture in society (11).

Their choice of any lifestyle in addition to their personal life, can affect the performance and physical, mental, emotional and social well-being of their family members and make it possible to have healthier generations in the future (12). The active role of health ambassadors requires a high level of health literacy. At the fifth World Conference on Health Promotion in Mexico, the World Health Organization (WHO) introduced health literacy as a cognitive and social skill that determines the motivation and ability of

individuals to understand and use information in a way that maintains and promotes their health (13).

In a study was conducted in 5 provinces of Iran, 28.1% of the subjects had adequate health literacy, 15.3% had border health literacy, and 56.6% had insufficient health literacy (14). Health ambassadors have an important role in identifying risk factors, supporting and educating individuals, clients to reduce risky behaviors, and adopt an appropriate lifestyle, so to achieve this important skills, they must be sufficiently aware of these factors. Therefore, to achieve this goal in this study, the study of lifestyle and its relationship with health literacy in health ambassadors were examined as one of the most effective and efficient volunteer forces that play a major role in educating and promoting community awareness.

Materials and Method

In this cross-sectional study, 200 ambassadors were selected using cluster random sampling. The study population included all health ambassadors covered by urban health centers in Urmia in 2019.

According to previous studies (15), the standard deviation of lifestyle in the community was 22 and the minimum difference score was 3. Therefore, based on the Cochran sample size, the sample size was estimated to be 200 people.

$$n = \frac{(z - 1 \frac{\alpha}{2} + z1 - \beta) z}{\omega^2}$$

We included individuals if they: were health ambassador (a person from each household who has at least 8th reading and writing), had a health ambassador file in the health center, be satisfied to attend in this study and they excluded if they: dissatisfied to attend in meetings educational and lack of criteria of health ambassador.

The sampling method was as follows: 10

centers or clusters were selected from all the existing centers (35 centers) in different areas. Then, 20 health ambassadors were randomly selected from each clusters or centers in which they were registered as a health ambassador. There were a total of 200 people. The questionnaire is organized in 3 main parts. The first part was about demographic information (age, level of education, job, marital status, Gender, and economic situation), the second part was the Lifestyle Questionnaire, and the third part included the health literacy Questionnaire.

Lifestyle Questionnaire (LSQ) was used to assess lifestyle. This questionnaire consists of 68 questions that were scored in the Likert scale as always = 4, usually = 3, sometimes = 2, and never = 1. It is worth mentioning that the score range of the questionnaire was from 68 to 272 points. Scores less than 136 were considered as poor score, scores between 136 and 204 were considered as average score, and scores higher than 204 were considered as good score. This questionnaire consists of 10 components including: physical health (eight questions), exercise and health (seven questions), weight control and nutrition (seven questions), disease prevention (seven questions), mental health (seven questions), spiritual health (Six questions), social health (seven questions), avoiding arbitrary use of drugs, narcotics (six questions), accident prevention (seven questions), and environmental health (six questions). Lali et al., in 2012 confirmed the validity and reliability of this questionnaire (16).

HELIA questionnaire was used to assess health literacy. This questionnaire includes 33 questions and 5 dimensions of the main skills (reading dimension, stress dimension, comprehension dimension, evaluation dimension, decision-making, and application of health information). it is scored from 0 to 100. Scores

from 0 to 50 is considered as the “inadequate health literacy”, from 50.1 to 66 is “insufficient health literacy”, 66.1 to 84 as “adequate health literacy” and grades 84.1 to 100 are “excellent health literacy”. Montazeri et al. has provided the design and psychometrics of this instrument and this questionnaire has acceptable validity and reliability in Iranian population. (17)

The questionnaires were completed after explaining the research objectives for all participants. Data were entered into SPSS software version 20 and analyzed by descriptive statistics, analysis of variance, and Spearman correlation coefficient. After stating the objectives of the research and obtaining informed oral consent from the participants, data were collected. It was also emphasized on the anonymity of the questionnaires and maintaining the confidentiality of information.

Results

The results showed that the mean age of the health ambassadors was 37.35 ± 9.57 years. In terms of gender, 46 (24.5%) were male and 145 (75.5%) were female. Also, the highest age group was related to the age group of 25 to 35 years (37.5%). Also, most of the subjects were married (86.5%) and had average economic status (58.5%). The relationship between demographic variables and lifestyle was investigated using one-way analysis of variance. The results showed that lifestyle had a statistically significant relationship with gender, marital status, and job ($p < 0.05$). Thus, the average lifestyle score of female health ambassadors, married ambassadors, and health travelers who were employees was higher than other individuals (Table 1).

Table 1: Demographic characteristics of the studied health ambassadors and its relationship with lifestyle

Demographic information		Frequency	Percentage	Average lifestyle score	P- value *
Age	15-25	17	8.5	209.33±26.38	0.07
	25-35	75	37.5	207.37±22.44	
	35-45	66	33	206.39±21.32	
	>45	42	21	210.37±25.50	
Gender	Man	46	24.5	198.37±26.33	0.01
	Female	145	75.5	218.39±22.52	
Marital status	Single	24	12	205.37±23.31	0.02
	Married	173	86.5	215.39±26.51	
	Belonging / widow	3	1.5	203.38±23.41	
Level of Education	Tips	73	41.5	207.32±27.21	0.8
	Diploma	78	39	208.42±20.31	
	University	39	19.5	209.40±23.40	
Job	housewife	84	42	203.40±22.41	0.008
	Employee	109	54.5	219.37±27.47	
	Free	7	3.5	202.36±23.34	
Economic situation	Good	33	16.5	210.38±21.24	0.4
	medium	117	58.5	209.48±27.51	
	Weak	50	25	208.28±23.43	

The results showed that the mean lifestyle score among health ambassadors was 208.38 ± 24.41 . The mean and standard deviation of lifestyle score and its various dimensions are presented in Table 2. Among the various factors involved in lifestyle, the field of disease prevention and exercise and health had the highest and lowest scores, respectively. In the lifestyle segmentation, the results show that 13.5% of the health ambassadors had a low-level lifestyle, 60.4% had a moderate level lifestyle, and 26.1% had a good level lifestyle.

Table 2: Mean and standard deviation of different levels of lifestyle of health ambassadors

Lifestyle dimensions	Mean and SD	least	Most
Physical health	22.75±3.1	10	35
Exercise and fitness	17.98±3.45	3	27
Weight control and nutrition	20.21±3.23	12	29
Disease prevention	23.94±2.87	11	28
Psychological health	21.35±3.38	12	27
mental health	19.72±3.31	10	25
Social health	22.12±3.18	11	27
Avoid drugs and narcotics	21.65±2.45	8	25
Accident prevention	21.91±3.15	11	29
Environmental health	19.21±2.41		
Total	208.38±24.41	110	260

Spearman correlation coefficient results showed that lifestyle with all its sub-domains positively and significantly correlated with health literacy ($P < 0.001$) (Table 3).

Table 3. Relationship between lifestyle and its dimensions with health literacy in health ambassadors

Variable	Correlation coefficient r	P- value
Physical health	0.276	<0.001
Exercise and fitness	0.324	<0.001
Weight control and nutrition	0.382	<0.001

Disease prevention	0.387	<0.001
Psychological health	0.398	<0.001
mental health	0.375	<0.001
Social health	0.352	<0.001
Avoid drugs and narcotics	0.374	<0.001
Accident prevention	0.381	<0.001
Environmental health	0.411	<0.001
Overall lifestyle	0.451	<0.001

Discussion

In the present study, most health ambassadors had a moderate lifestyle which is consistent with studies that were conducted by Peyman et al, and Nilsaz, Goodarzi et al, (18) (19, 20). They indicated that the moderate level of lifestyle in health volunteers and student. Considering the results and prevalence of non-communicable diseases and the importance of lifestyle in the occurrence and prevalence of these diseases, improving the lifestyle of health ambassadors' lifestyle is essential to reduce type of behaviors with high risk.

In the present study, lifestyle scores were higher in women health ambassadors than men. In a study by Díez et al., similar results were reported in the study, which was conducted on students' health behaviors in Mexico (21). Also, in Abdolkarimi's study on health-promoting behaviors among Urmia health workers, they reported same results with the our finding (22), but in the Choi study that was conducted on nursing students in Hong Gang, insignificant difference was observed between the male and female population (23). This difference in health-promoting behaviors between men and women could be due to the difference in level of their awareness, occupation, education, the provision of appropriate conditions for the activity, and culture of that society regarding health-promoting behaviors between both sexes.

On the other hand, in the present study, marriage had a significant relationship with

lifestyle. Lim et al., in their study on Korean women showed that healthy lifestyle behaviors in married people were more than other people, which is consistent with the present study (24). However, the results of Yarahmadi's study weren't in line with our study finding (12).

In this study, a significant relationship was found between lifestyle and individual's occupation. According our result, health ambassadors, who were employed, had a higher lifestyle score and health literacy than those were housewives and self-employment. Khezerloo et al. (25) in their study showed that there is a significant relationship between health literacy and employment and people with job had higher health literacy. Results Alidosti et al. (26) Rafiezadeh et al., assessed health literacy and health-promoting behaviors in non-employees and their result is consistent with the present study, which may be one of the reasons for the better healthy lifestyle in employees related to their education.

In this study, the lowest lifestyle score among lifestyle domains was related to physical activity. In the study of McElligott et al. (27), the lowest score was related to the field of physical activity, which is consistent with the present study. Most studies on health-promoting behaviors have shown low scores in the field of physical activity (28, 29). Since physical activity is directly related to people's health. Thus, it is important for managers to pay attention to it because it can affect their productivity and should be considered in health-focused programs (30).

The study of the relationship between lifestyle level and health literacy level showed that lifestyle with all its sub-domains had a positive and significant correlation with health literacy. Also, lifestyle significantly predicted health literacy in health ambassadors. In the study of Peyman et al., the relationship between

health literacy and healthy lifestyle showed that health literacy had a positive and significant correlation with all sub-domains of lifestyle (18). Wagner's study in the UK found that people with limited health literacy had fewer healthy lifestyle behaviors (31) and Adams' study in Australia found that people with low health literacy rates had higher risk behaviors (32). Therefore, improving health literacy skills and the level of individual's knowledge and awareness about diseases and how to treat them lead to change people's attitudes to observe preventive behaviors and encourage them to use prevention services, promote their health behavior, pay more attention self-care skills, improve health-related responsibilities, as well as reduce health care costs, drug use, and the burden of visits to health centers. In addition, with increasing individual's health literacy people become more sensitive about their health and compliance with the recommendations provided by health professionals to improve the quality in life of health ambassadors.

Conclusion

By increasing health literacy, the healthy lifestyles are also increase in health ambassadors. As a result, health ambassadors with a high level of health literacy have a higher standard of living, participation and motivation in health-related activities, quality of life, life satisfaction, and consequently have a better life expectancy. This leads to the more satisfaction among health ambassadors toward their living conditions, current status and context of the cultural system. Therefore, in order to improve and enhance the lifestyle and life satisfaction in health ambassadors, developing the officials prepare training programs is suggested to improve the health literacy in health ambassadors.

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they have no conflict of interests.

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