Investigating the Health Literacy of Addicts Referring to Addiction Treatment Centers in Qom City and Its Relationship with Demographic Variables

ABSTRACT

Background and Objective: People's ability to acquire, analyze, and understand basic health information and services needed to make decisions about health and health issues is called health literacy. The purpose of this study was to investigate the health literacy of addicts referring to addiction treatment centers in Qom city and its relationship with demographic variables, 2019.

Materials and Methods: This analytical cross-sectional study was performed on 304 subjects. Samples were obtained through regular random sampling from clients of several addiction treatment centers in Qom city, 2019. Data were collected using Health Literacy for Iranian Adults (HELIA) questionnaire. The data were analyzed using ANOVA, T test, and Pearson and P <0.05 was considered.

Results: The results showed that about 27.3% of subjects had inadequate, 26.6% borderline, 23.7% adequate and 3.6% excellent health literacy. The mean age of the samples was 42.51±11.17 years. 33.9% used health network and health related programs. There was a significant relationship between health literacy a4nd source for Obtaining Health Information (p = 0.015). In this study, there was a significant relationship between health literacy and its dimensions with education (p = 0.000) and job (p = 0.04). Results of correlation test showed that health literacy had a significant negative relationship with age (r = -289 = p = 0.000).

Conclusion: Since health literacy can be effective in promoting preventive behaviors and due to the low level of health of the samples studied in this study, more attention should be paid to this issue. Also, because the target population of addicts is low health literacy, there is a lack of awareness about the dangers of addiction, which leads to greater involvement in addiction and its consequences. . By carefully planning and designing effective training programs in this field can be an effective step in improving the health literacy of addicts. The poor use of samples from health-related television programs requires authorities to cultivate health literacy through the use of accessible media, virtual networks, and training classes in addiction treatment centers.

Paper Type: Research Article

Keywords: Health literacy, Addicts, Qom, Iran.

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Introduction

One of the information needs in daily life is health information. Health information covers a wide range of information, including information about diseases and how to prevent and treat them which is a major concern for many people (1).

People in a community need to be able to access and provide health information in such a way that they can make healthy decisions. What enables patients and others to play an active role in health and access to health services is a set of skills that are called health literacy nowadays. Health literacy is a broad and complex concept that has been defined in a variety of ways. The World Health Organization considers health literacy as cognitive and social skills that determine the motivation and ability of individuals to acquire and access information, understand and use it to promote and maintain appropriate health (2).

Modern health systems are increasingly relying on their own health management. The ability to do so requires patient literacy skills to understand health literacy information. But participation in such a task may be difficult for patients (3), so the concept of health literacy has been developed. Health literacy is a new concept which first introduced in 1791 in scientific literature related to health education. It was ignored for two decades, but was introduced by Kickbusch in 1974 (4).

Over the past decade, concerns about literacy and health skills have been a serious warning for many primary health care delivery systems. Accordingly, educating people and empowering the community with regard to disease prevention and care has become an important principle. In this context, promoting the health literacy of different strata of society and identifying the effective and related factors are among the important goals of the health system (2).

Health literacy is important in health programs. Health literacy is closely linked to empowerment, which can be defined as "the ability of citizens to make the right decisions about health in their daily lives" at home, at work, in health care, in the marketplace, and in the political arena. The concept of "health literacy" was originally used in the United States and Canada. However, it is now used internationally, not only in health care but also in the context of public health (5).

Health literacy is the result of the cooperation of individual and social factors and addresses health literacy concerns and dimensions (6). Therefore, examining this important principle in relation to addicts can lead to very positive results. Unfortunately, the problem that has further affected the negative impact of Iranian society on its negative consequences is addiction. Drug abuse is a pervasive global problem that has become a source of concern for many human societies. The prevalence of this phenomenon is increasing rapidly in the world and in our country. The age of infection is significantly reduced and is more common among young people. Some unofficial sources estimate that the country's addict population is as high as 6 million (7).

The results of the study of Karimi et al. showed that there is a significant relationship between health literacy and the rate of addiction in the study subjects. Health literacy significantly increases people's quality of life and mental health and is effective in reducing addiction. People with lower health literacy are more vulnerable to environmental stresses and this is health literacy that enables individuals to respond negatively to major anomalies (8).

According to research by the US Health Care Strategies Center, people with low health literacy are less likely to understand and follow written and spoken information provided by health

professionals. So, health literacy is a critical indicator of health care outcomes and costs (6). Based on previous studies, addicts have low health literacy (9) and alcohol consumption in adolescents reduces their health literacy (10). Thus, prevention of drug abuse can play a significant role in preventing the imposition of heavy costs on society. One important way to prevent addiction is to inform different groups of people about the adverse effects of drugs on their physical, mental and social health and that of their families, which is enhanced by increased health literacy. Since health literacy can be influenced by many factors including individual, social, economic, cultural and language factors, different outcomes have been reported in different societies (11).

Given the importance of the subject and limited studies on addiction and lack of sufficient resources in this field, this study intends to determine the health literacy of addicts referring to addiction treatment centers in Qom and its relation to demographic variables informing the officials and planners.

Considering the importance of health literacy in the international community, much research has been done abroad but within the country, little research has been done on the topic of health literacy. Some studies on health literacy will be mentioned here. Kohan et al., in a study titled "Evaluation of relationship between reproductive health literacy and demographic factors in women," found that 91% of women had good reproductive health literacy and only 9% had no knowledge (12). In a paper titled "The relationship between health literacy and the recovery rate of cardiovascular patients after bypass surgery ", Miri et al. stated that 46.6% had borderline health literacy, 38.6% inadequate health literacy, and 14.6% had adequate health literacy (6). Jawadzade et al. in a research titled,

"Health Literacy among Adults in Isfahan," found that 38.5% had adequate health literacy, 36% had borderline health literacy, and 25.5% had inadequate health literacy (13). Mollakhalili et al. found in a study in Isfahan that most hospitalized patients had insufficient health literacy (14). Sørensen et al. found in the European Health Literacy Survey that 12% had inadequate health literacy and 47% had limited health literacy (5). Mackert et al., In a study entitled " Health Literacy and Health Information Technology Adoption ", found adequate health literacy versus low health literacy had a significant relationship with participation in fitness (p = 0.02) and nutrition (p = 0.001) (15). In a study on health literacy in German adults, Jordan et al. found that more than half (55.8%) had adequate health literacy and 12.3% had inadequate health literacy (16).

A review of the literature indicates that health literacy has been the focus of researchers, especially in recent years, but few studies have been conducted in the world about addiction and drug abuse.

Materials and Methods

This cross-sectional study was performed on 304 people in 2018. Samples were randomly selected from a number of private addiction treatment centers in Qom. The data were collected by a questionnaire using the Health Literacy Assessment Tool. Inclusion criteria were: living in Qom during the admission process for quitting addiction and willingness to participate in the study and exclusion criteria were unwillingness to participate in the study. After obtaining informed consent from the research participants, the study samples were reassured that all completed questionnaire information were kept confidential. The sample size was calculated based on the mean estimation formula in the community and considering the results

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of Mahmoudi et al.'s study (2) with alpha of 0.05, standard deviation of 0.86 and error of 0.1 equal to 300 individuals.

Demographic characteristics included variables such as age, sex, marital status, education, occupation, type of used drug, watching health programs, and type of addiction withdrawal medication.

The data collection tool was HELIA Questionnaire which was used to assess Montazeri et al.'s (1393) indigenous questionnaire to measure health literacy. The questionnaire consists of 33 items and measures 5 dimensions of access, reading, understanding, evaluation, decision making, and behavior. The Likert scale is a 5-item scale for measuring items (always = 4, often = 3, sometimes = 2, rarely = 1, never= 0). A score of 0 to 100 was considered by the designers of the questionnaire to include four levels of inadequate (0-50), borderline (50/66), adequate (84-1/66) and excellent (84-100. The reasons for using this tool included its localization, address all aspects of health literacy, dimension measurement, generalizability (so that this tool is specific to the population, occupations, education, and groups). It also has the capability to measure health literacy levels with acceptable accuracy) and its ease and speed of completion due to the lack of a number of questions on other tools (such as adult health literacy testing). This tool has been used in various studies so far, indicating

its acceptable validity (2, 18). Reliability of the Health Assessment Questionnaire in Montazeri et al.'s research was 0.89- 0.72 which indicates acceptable reliability (17).

Collected information were analyzed by SPSS software using T-test, ANOVA and Pearson statistical tests. Significance level was lower than 0.05 in all statistical tests.

Results

The study was conducted on 304 addicts. The mean age of the samples was 17/11±51/years. 94.1% of the samples were male and 5.9% were female. Most of the samples were under diploma (56.9%) employed (73.4%) and married (60.5%). When receiving health information, only 18.1% of physicians and 64.7% of physicians, along with other sources, know about health and disease. Most of the samples (41.4%) used opium and 61.2% used methadone to quit addiction. Also, 33.9% used health network and health related programs.

About 27.3% of the subjects had inadequate health literacy, 26.6% borderline, 23.7% adequate and 3.6% excellent health literacy level. Thus, about 26% of the population were in good health (Table 1).

According to Table 2, there was a significant relationship between health literacy and the source of health information.

Table 1: Health literacy status in addicts referring to addiction treatment centers in Qom

Health Literacy Dimensions	Inadequate	Borderline	Adequate	Mean. SD
	Percent (Frequency)	Percent (Frequency)	Percent (Frequency)	
Accessibility	32.9(100)	22.4(68)	35.2(107)	19.89±59.35
Reading	38.2(116)	10.9(33)	44.7(136)	25.93±57.04
Using/ Decision Making	29.3 (89)	20.7(63)	27.3(82)	21.28±58.99
Understanding	30.3(92)	27.3 (83)	28.6(87)	20.80±59.02
Evaluating	59.2 (180)	16.8(51)	18.1(55)	24.26±44.89
Total	27.3 (83)	26.6(81)	23.7 (72)	19.67±55.67

Table 2: Determine the relationship between health literacy and its dimensions with the way health information is acquired

Health Literacy Dimensions		Mean. SD	Minimum	Maximum	p
Reading	Physician	55.66±25.42	0	100	0.004
	Media	63.13±22.05	0	100	
	Friends	37.12±21.20	0	58.33	
	Physician, Media and friends	60.53±25.94	0	100	
	Physician and Media	61.03±25.38	0	100	
	Media and Friends	41.66±32.20	0	83.33	
	Friends and Physician	51.06±24.71	0	83.33	
	Total	57.05±25.95	0	100	
Accessibility	Physician	60.90±20.85	12.50	100	0.038
	Media	61.94±22.63	4.17	100	
	Friends	43.56±24.10	12.50	91.67	
	Physician, Media and friends	60.14±18.01	8.33	87.50	
	Physician Media	61.91±19.41	12.50	95.83	
	Friends Media	50.78±15.82	29.17	79.17	
	Physician Friends	55.62±19.20	16.67	83.33	
	Total	59.16±19.97	4.17	100	
Understanding	Physician	61.32±19.69	14.29	69.43	0.009
	Media	64.39±23.99	0	100	
	Friends	42.85±22.86	10.71	75	
	Physician, Friends Media	58.84±18.75	14.29	198.29	
	Physician Media	62.13±19.10	14.29	96.43	
	Friends Media	46.65±17.99	17.86	71.43	
	Physician Friends	54.76±24.21	7.14	92.86	
	Total	58.96±20.97	0	100	
Evaluating	Physician	45.40±20.18	0	87.50	0.001
	Media	52.01±25.78	6.25	100	
	Friends	24.37±24.55	0	62.50	
	Physician, Friends Media	47.48±24.85	0	87.50	
	Physician Media	49.63±22.88	0	100	
	Friends Media	29.29±23.35	0	68.75	
	Physician Friends	38.78±24.08	0	81.25	
	Total	45.08±24.20	0	100	
Decision Making	Physician	62.90±23.30	20.83	139.58	0.003
	Media	60.25±20.08	20.83	89.58	
	Friends	33.33±22.18	6.25	66.67	
	Physician, Friends Media	59.72±18.56	14.58	87.50	
	Friends Media	61.49±20.08	12.50	100	
	Physician Media	54.55±16.49	25	83.33	
	Physician Friends	59.17±22.95	14.58	58/89	
	Total	59.25±21.25	6.25	139.58	
Total	Physician	58.52±18.67	14.94	58.06	0.015
	Media	60.205±18.69	18.15	94.58	
	Friends	38.95±19.82	12.86	58.57	
	Physician, Friends Media	56.99±19.44	12.02	86.55	
	Friends Media	±58.7719.54	14.17	90.36	
	Physician Media	±44.5917.49	16.90	70.30	
	Physician Friends	52.37±20.42	8.93	78.15	
	Total	55.84±19.72	8.93	94.58	

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In this study, there was a significant relationship between health literacy and its dimensions with education (p = 0.000) and occupation (p = 0.04) but there was no significant relationship between health literacy and marital status. Results of correlation test showed that health literacy had a negative significant relationship with age (r = -289 = p = 0.000), as with decreasing age, health literacy also decreased (Table 3).

Table 3: Determine the relationship between demographic characteristics with health literacy and its dimensions

Health Literacy Dimension	Sex	Occupation	Education	Marital Status	Age		Drug Type
	p	p	p	p	r	p	p
Reading	0.08	0.01	0.000	0.09	-289	0.000	0.57
Accessibility	0.15	0.02	0.000	0.12	-254	0.000	0.61
Understanding	0.05	0.000	0.000	0.33	-235	0.000	0.93
Evaluating	0.47	0.01	0.000	0.81	-146	0.000	0.74
Decision Making	0.34	0.208	0.000	0.64	-137	027/0	0.81
Total	0.15	0.04	0.000	0.33	-231	0.000	0.93

Discussion

The results showed that the studied population's health literacy was poor. Among the dimensions of health literacy, the highest average is related to the accessibility dimension and the lowest is to the evaluation dimension. The results show that most drug addicts in Qom have inadequate level of health literacy. In this respect, these results are similar to those of previous studies, such as Nekoei-Moghadam (19) and Mahmoudi (2). In a 2013 study by Stewart et al., in a study on health literacy in smokers, they found that people with lower health literacy were nicotine dependent and less aware of the dangers associated with smoking. People with less health literacy are also less likely to quit smoking (20).

In this study, a significant relationship was found between health literacy and its dimensions with education and occupation. Similar to the results of the present study, the findings of Javadzade and Sheikh Sharafi also show the effect of education on the level of health literacy (13) (23). A high level of education can justify a high level of health literacy. In Mahdavi's study, there was a significant relationship between occupation and health literacy (24). In line with this result, the study by Stewart et al. found that people who are less educated and also earn less have less health literacy (20).

The results of correlation test showed that health literacy had a significant negative relationship with the age of the subjects, which decreases with increasing age; In line with this study, the findings of Mahdavi and Sheikh Sharafi also confirm this finding (23, 24). Certainly, cognitive functioning decreases with age, and as distance from formal education decreases sensory abilities (25), health literacy also declines.

One of the limitations of this study is the collection of questionnaire information that may not have been obtained by the respondents. Other limitations include some people's unwillingness to participate in this study. It is suggested that qualitative and interventional studies be conducted in line with the results of this study.

Conclusion

Since health literacy can be effective in promoting

preventive behaviors and as the level of health is low, more attention is needed to health literacy. Also, because the target population in this article is addicts who have poor literacy levels and low health literacy levels, there is a lack of awareness about the dangers of addiction, which leads to further involvement in addiction and its consequences. Carefully planning and designing effective training programs in this field can be an effective step in improving the health literacy of addicts. The poor use of samples from health-related television programs requires authorities to promote health literacy through the use of accessible media, virtual networks, and training classes in addiction treatment centers.

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