

Identifying Effective Factors on Promoting Health and Hygiene Education in Secondary Schools of Sistan and Baluchistan Province: A Qualitative Study

Mohammad Amin Jahantigh¹ , Reza Khamarniaei² , Farnaz Jahantigh^{3*} , Maryam Jahantigh Haghighi⁴ 

1. Medical student, Zahedan University of Medical Sciences, Zahedan, Iran
2. Executive Vice President of the Branch Management of Maskan Bank, Sistan and Baluchistan Province, Zahedan, Iran
3. Health care, Education, Zahedan District 2, Zahedan, Iran
4. Department of Nursing, School of Chabahar Nursing, Iranshahr University of Medical Sciences, Chabahar, Iran

ARTICLE INFO

Original Article

Received: 11 Jun 2023

Accepted: 25 Sep 2023



Corresponding Author:

Farnaz Jahantigh
farnaz1011@gmail.com

ABSTRACT

Background: This was a qualitative study with the aim of specifying effective factors regarding the improvement of health and hygiene education in secondary schools of education and training in Zahedan city in Sistan and Baluchistan province.

Methods: The research community included all the academic experts, principals, and healthcare providers of Sistan and Baluchistan province in the academic year 1401-1402. Purposive sampling method was conducted on the statistical population, and those who met the criteria for entering the study were selected through snowball method. The number of samples was selected based on the principle of theoretical saturation, and 20 people were selected. Data were analyzed using content analysis method and theme analysis approach.

Results: The results of the study led to the identification of effective factors on the promotion of health and hygiene education in secondary schools, which can be considered in health education plans of schools.

Conclusion: By identifying effective factors on the promotion of health and hygiene education in secondary schools, effective measures can be taken in maintaining and promoting healthy lifestyle in future generations.

Keywords: Education, Health, Hygiene, Sistan and Baluchistan

How to cite this paper:

Jahantigh MA, Khamarniaei R, Jahantigh F. Identifying Effective Factors on Promoting Health and Hygiene Education in Secondary Schools of Sistan and Baluchistan Province: A Qualitative Study. J Community Health Research 2023; 12(2): 297-306.

Copyright: ©2023 The Author(s); Published by ShahidSadoughi University of Medical Sciences. This is an open-access article distributed under the terms of the Creative Commons Attribution License (<https://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Introduction

Health and well-being of people in society is the biggest global challenge which all countries face (1). All countries focus on all different groups of society in order to achieve health. Among these groups, students are of particular importance, because they are the future builders of the society and have a special role in promoting health and transferring its concepts to others (2, 3). The health of school-age people can play a major role in the success and development of a country because students can learn healthy behaviors and lifestyle due to interaction with peers and receiving correct training from healthcare providers (4- 6) . School is the key environment for improving students health after family. A huge part of student's behavior can be learned, modified, and changed in the school environment. In this regard, Education is the most important official institution and the preserver of the education process in all fields, including the process of health education and health patterns. This organization's mission is to provide students with maximum level of quality education in preparation for leading a quality and healthy life by emphasizing basic competencies (7-9). A person's health during school is affected by many individual, interpersonal, and environmental factors, including interaction with other students, school parents, quantitative and qualitative school conditions, laws, health and nutrition services, and the education received. School is an institution with the function of teaching and learning. Therefore, it is very important to consider the concept of the health regarding all the elements of this institution, such as students, school parents, and physical and social environment of the school (10). Past studies show an increase in health-threatening risk factors among students, and these factors can potentially reduce students' creativity and role-playing in society if proper intervention is not carried out (4, 5). The educational system of the school plays an important role in health education and causes

the formation of students' personality, attitude, skills and knowledge. The world health organization (WHO) considers health a complete physical, mental, and social well-being, and the mere absence of disease or disability is not the cause of health. The important issue in this regard is health education. Kazemian et al. consider health education a part of healthcare which affects health behaviors (11). Investing in school health education methods is one of the best general strategies for development and social welfare. This investment will ensure that students receive proper care and health facilities and have a good learning and broadcast health messages from school to the family (12). With a population of over 13 million students, Iran is one of the youngest countries in the contemporary world. In a society with this demographic structure, health and education will be important issues for planners and investors (13). WHO considers school health to be one of the 4 circles which make up the quantitative range of social and health services in advanced societies as a fundamental and health-creating base regarding public health issues of developing countries(13). School health is a set of measures implemented in order to diagnose, ensure ,and promote physical, mental, social, and psychological health of students and those employees who are in some way related to students (14). According to the prediction of by WHO, 70-80% of the deaths in developed countries and 40-50% of the deaths in developing countries are due to diseases related to lifestyle (15). According to the study conducted by the national youth organization, 51% of the surveyed teenagers do not have a suitable lifestyle. Adolescence is associated with rapid changes in behavioral patterns. These changes expose the adolescent to the prevalence of high-risk health behaviors such as inactivity, unsuitable eating habits, and smoking. In the new concept of health, people are responsible for their own health and should choose a

healthy lifestyle for themselves; The realization of this concept depends on health promotion programs (16, 17). Considering that poverty and lack of awareness can be the basis of many complex and costly problems, through education awareness should be increased. Therefore, teaching correct ways of life is a principled and fundamental matter (18). In Iran, school health educators are considered at the frontline of realizing this goal. Health education in school, in addition to preventing many health incidents such as bone fractures and infectious diseases in schools, improves the quality of students' learning (19, 20). There are about 3,500 health coaches for 14 million students in Iran, which should increase at least 6 times according to the definition of the global standard. According to the head of the Convocation Education and Review Committee and based on the global health index, there should be one healthcare provider for 700 students, while in Iran, there is one healthcare provider for more than 4,000 students (21). Considering several millions students in schools, the priority of health over treatment in terms of economic savings, health education and training professional healthcare providers and their presence in schools are imperative. Studies in the field of school health education show that recently school health has received much attention (22, 23). In this regard, identification of influential factors in improving the quality of health education can be an effective step in improving the level of education received by students, and ultimately their lifestyle in the future. So, the present study aims to identify the factors influencing the improvement of health and hygiene education in secondary education schools of Sistan and Baluchistan province during the academic year 1401-1402.

Methods

The present qualitative study was conducted with the aim of identifying effective factors on

the promotion of health and hygiene education in secondary schools of Zahedan city in the academic year of 1401-1402. Research community included all the university experts, managers, and healthcare providers of Zahedan city. Participants were selected according to the theoretical saturation principles of 20 people who met the inclusion criteria from statistical population. Inclusion criteria consisted of willingness to participate in the study, speaking fluently, having a master's degree or PhD in nursing, psychology, school health and health education, and having at least 15 years of service in education or academic centers. Exclusion criteria included unwillingness to complete the interviews. Before conducting the interview, participants were assured that their information will be kept confidential, and after the analysis of the interviews, the text of the interview will be deleted. The method of conducting the interview was semi-structured and mutual trust was established between the interviewer and the interviewee. The interviews were conducted face-to-face at people's workplaces and in a quiet room. Interviews continued until classification and themes emerged and data saturation was reached. The duration of the interview was between 35 and 50 minutes on average. In order to determine the reliability and validity of the interview and to ensure the accuracy of the findings, the corrective opinions of related professors and professional education experts were taken into consideration and applied in the necessary cases. Theme analysis method was used to analyze the obtained data because it is an easy, flexible, and economical method in terms of time to identify, analyze, and express the patterns in the data.

Results

20 participants completed the study. The participants differed from each other in terms of demographic characteristics, as reported in Table 1.

Table 1. Demographic characteristics of the participants

	Variable	Frequency
Gender	Female	12
	Male	8
Education	Expert	4
	Master's degree	10
	Phd degree	6
Field Of Study	Nursing	6
	Health education	5
	Health schools	4
	Psychology	5
Place of employment	University	7
	Education	13
Field of profession	Manager	6
	Professor	5
	Professional healthcare	9

After completing the interview, answers were analyzed and checked by the researcher. Using the content analysis method and the theme analysis approach, items regarding

effective factors on the promotion of health and hygiene education in secondary schools were identified as shown by Table 2.

Table 2. Identifying the factors and components affecting the promotion of health and hygiene education in secondary schools

Indicator	Components	Dimensions
The officials' awareness of the organization's plans to emphasize health and hygiene education, and cooperation between educational activists and healthcare providers	Improving the awareness of educational officials	Factors Affecting The Development Of Health Education
Using formal and informal spaces in health education, using training camps and empowering learning process, variable, and flexible educational programs	Equipped and separate room	
Employing expert and professional employee in schools	Healthcare	
Using educational magazines, health education videos, and using educational games to exert cognitive knowledge in the psychomotor field	Educational package	
Having worksheets for exploring teaching and learning process, and providing educational feedback	Programs of the education organization in line with health education	
Involving families in applying methods for learning process and the educational feedback	Family	
Holding official programs on radio and television about dangers of not receiving proper training in order to stimulate and promote the tendency to learn health programs	Use of press and media	

Based on the results of Table 2, effective factors on the promotion of health and hygiene education in secondary schools have the components of improving the awareness of educational officials, equipped health

rooms, healthcare providers, training packages, programs of the Education organization in line with health and health education, family, the use of the press and media.

Table 3. Facilitating and effective factors on promoting health and hygiene education in secondary schools

Indicator	Components	Dimensions
Various educational items, defining health and wellness for the student and its importance, using educational experiences to better understand the matter	Cognitive	Content
Attention to student's interests and feelings during health education paying attention to individual differences in teaching-learning	Emotional	
Respecting the student's correct health beliefs and training in conditions of inappropriate behavior	Psychological	
Having a regular and predetermined schedule of health education in the teaching-learning process, the use of various educational methods, the use of various educational models and theories to facilitate learning process, including the Pender's health promotion model	Healthcare pedagogy	Healthcare
Participating in continuous training courses to become familiarized with up-to-date and appropriate information	Continuing education courses	

Based on the results of Table 3, facilitating and effective factors on the promotion of health and hygiene education in secondary schools have two dimensions of content and healthcare. The content dimension includes

cognitive, emotional, and psychological components, and the healthcare dimension includes healthcare pedagogic components and continuous education courses.

Table 4. Consequences of identifying the factors and components affecting the promotion of health and hygiene education in secondary schools

Dimensions	Components	Indicator
Goal	Development of health literacy	Familiarizing with health patterns, health promotion strategies, and disease prevention
	Clarification of attitudes and values	Clarifying one's health beliefs and understanding health beliefs
	Social competence	Focusing on the concept of social health and the effects of people's health regarding society and vice versa, taking responsibility for the health of congeners
	Personal development and empowerment	Perform attention to a healthy lifestyle in yourself and others
	Promotion skills	Achieve to know the basic proceeding when health adventure occurs
	Helping the individual to change unhealthy health behavior	Improving the level of healthy lifestyle, promote appropriate health attitudes, values and personal skills

Based on the results of Table 4, the consequences of identifying the factors and components affecting the promotion of health and hygiene education in secondary schools include goal, the six components of health literacy development, explaining attitudes and values, social competence, individual development, improving skills to change inappropriate health behaviors and the eleven indicators.

Discussion

The Education Administration is one of the most important official institutions responsible for educating a large group of future human assets of any country. School is a part of this administration and represents a complex social system with unique features. Schools and educational systems will be effective if they detect the needs of the current changing society and the expectations

of people from this organization are met. Meeting people's expectations is one of the important criteria in the quality of services provided by any organization, including the Education Administration. What should be predicted, planned, and implemented in a school is the education of the student as a person in the family and society in order to experience a high quality life. Therefore, a consistent educational plan in schools depends on changing all educational factors; including principals, teachers, healthcare workers, families, media, and non-governmental organizations, which in a way interact with education process and students. In such an environment, the programs, while being organized, are full of opportunities for selection, preference, and conscious free choice, and each student, based on his/her talent and ability, has multiple opportunities to understand and improve his behavior. Planning educational opportunities is done by respecting the characteristics of each of the stages of education and incorporating the elements agents of education. Therefore, the present research identified effective factors on the promotion of health and hygiene education in secondary schools of education and training in Zahedan city in the academic year 1401-1402. The results demonstrated that effective factors in promoting health and health education include enhancing the awareness of educational officials, equipped and separate health rooms, healthcare providers, training packages, Education Administration programs in line with health education, family, and using the press and media.

A study similar to the current research was not found in review of literature. Several studies (24-28) have reported similar results, but since these studies were done quantitatively, the present study can be used as a guide to practice in the field of health education and lead to the development of effective programs. In this study, family was

regarded as one of the influential components in the investigation of factors affecting the promotion of health and hygiene education in the family, as discussed by Rabiei et al. (29), and the effect of educational interventions based on the model have been investigated regarding family-oriented empowerment of the elderly. The result was that the implementation of family-oriented educational programs can have an impact on improving the level of self-efficacy, self-esteem, and life quality of the elderly. Since power and control in the family is a vital issue which affect empowerment, and due to the impact of interactions, the change of one person can affect the entire system. It can be expected that empowering one person in the family can be effective on empowering the whole system in achieving health goals (30). This was in line with the results of the present study on the effective factors in the improvement of health education. In a recent study, the family was introduced as one of the effective factors in the improvement of health and hygiene education in secondary schools. In the study by zare et al., the use of multiple media, including educational brochure, can be effective in education. The use of effective educational media prepared in accordance with scientific standards will be able to change the desired attitude, knowledge, and behavior in a wide range of health concerns. Therefore, it is necessary to consider the standards in the development of educational content so that the quality of the provided education is maintained and improved (31). Adapting educational materials to the age group, culture, and educational needs is an important aspect of health information and a quick and reliable way to evaluate the quality of educational materials. In other studies (32-37), it was also reported that the use of educational aid like media can be effective regarding learning experiences of the trainees. In the present study, the importance of using educational media in providing health education was also pointed out. In some studies (33-41), the use of

charitable institutions in order to achieve organizational goals was taken into account because the costs of the organization alone in order to achieve effective goals were not efficient, and there was a need for people's support. In the meantime, raising the awareness of school heads and educational officials was identified as a factor in promoting health education in schools. In many studies (42, 43), up-to-date and professional knowledge of principals was mentioned in order to achieve organizational goals ;they have pointed out that professional development of principals is a key issue in school improvement; such preparation enables principals to acquire knowledge, skills, and attitudes necessary to effectively guide schools and create major changes. Therefore, knowing the factors regarding professional development of school heads and equipping them with the required knowledge and skills is necessary and inevitable. One of the most important things in professional development is the use of up-to-date knowledge in line with technology in the specialized field and education and training (43). Therefore, the development requirements of any organization, including Education Administration, is to have developed human resources, and on top of that, principals as a sustainable competitive advantage. In this regard, in order to provide specialized and efficient services, it seems necessary to appoint a healthcare provider with up-to-date and specialized knowledge to provide effective and professional training in a suitable place in line with educational needs in schools .On the other hand, the proper environment in schools can prevent many unfortunate and irreparable incidents from happening by timely intervention (44-46). Based on the review of literature and the results of the resent study, it is necessary for the trustees of Education Administration to make a commitment to prepare the ground for health and hygiene education in schools as an important activity.

Conclusion

Since education is one of the most fundamental principles for prevention of any controllable problem, the results of the present study showed that by identifying the effective factors on promoting health and hygiene education in secondary schools, a healthy lifestyle for future generations can be established.

Acknowledgment

Due to the qualitative nature of present study, and the fact that there was no intervention on the research participants, this research did not have a code of ethics and the ethics of the research were observed in all stages of the study. Hereby, the researchers express their gratitude to the participants in the research who helped us in conducting this study.

Conflict of interest

The authors declared no conflict of interest.

Funding

This research received no specific grant from any funding agency in the public, commercial, or not -for -profit sectors.

Ethical considerations

Due to the qualitative nature of the study and the absence of any intervention on the research participants, it does not have a code of ethics. However, all the rules of research ethics have been observed and are clearly stated in the methodology section.

Code of Ethics

There were no ethical considerations to be considered in this research.

Authors' contributions

M. A. J designed and supervised the research, R. Kh collected data collection and prepared the manuscript; F. J prepared the manuscript and finalized the study.

Open Access Policy

JCHR does not charge readers and their institution for access to its papers. Full text download of all new and archived papers are free of charge.

References

1. Simovska V, Nordin LL, Madsen KD. Health promotion in Danish schools: local priorities, policies and practices. *Health Promotion International*. 2015; 31(2): 480-9.
2. Khodabandeh M, Maleki Avarasin S, Nikniaz L. The relationship between health literacy, perceived self-efficacy and self-care performance of female senior high school students in health promoting schools of Miyaneh, 2016-2017. *Journal of Health Literacy*. 2017; 2(3): 164-76. [Persian]
3. Bramke, Moin, Laden. Comparison of personality traits and mental health of gifted and normal students of the first secondary education of one district of Shiraz. *Psychology studies and educational sciences*. 2020; 31(6): 255-65.
4. Khosroshahi JB, Kaleybar RH, Farid A. The effectiveness of promoting health education program on academic stress, life skills and risky behaviors among students. 2017. [Persian]
5. Ramezani H, Nikbakht HA, Nasrollahpour Shirvani SD, Ahoei KH, Mohsenian H. Effect of health promoting school program in schools of the city of Babol: 2013. *Journal of Health*. 2016; 6(5): 547-56. [Persian]
6. Kochaki GM, Kochaki AM, Charkazi AR, et al. Investigating The Effect of Implementing The School Based Health Promotion Program on Students' mental Health. 2011; 14-19 [Persian]
7. Jessiman PE, Campbell R, Jago R, et al. A qualitative study of health promotion in academy schools in England. *BMC Public Health*. 2019; 19(1): 1-3.
8. McIsaac JL, Penney TL, Ata N, et al. Evaluation of a health promoting schools program in a school board in Nova Scotia, Canada. *Preventive medicine reports*. 2017; 5: 279-84.
9. Langford R, Bonell C, Jones H, Poulidou T, Murphy S, Waters E, Komro K, Gibbs L, Magnus D, Campbell R. The World Health Organization's Health Promoting Schools Framework: A Cochrane Systematic Review and Meta Analysis: Beki Langford. *European Journal of Public Health*. 2014; 24(suppl_2): ckul63-051.
10. Zarei F, Ghahremani L, Khazaei-Pool M, et al. Exploring the strengths, challenges and improvement strategy for health-promoting schools from school health experts. *Iranian Journal of Health Education and Health Promotion*. 2017; 5(3): 240-50. [Persian]
11. Kazemian R, Ghasemi H, Movahhed T, Kazemian A. Health education in primary school textbooks in Iran in school year 2010–2011. *Journal of Dentistry (Tehran, Iran)*. 2014; 11(5): 536. [Persian]
12. Al-Ansari SS, Khafagy MA. A proposed role for physicians in school health. *Annals of Saudi Medicine*. 2003; 23(1-2): 95-7.
13. M Nekoei M, GHA N. Investigation of environmental health condition and safety of schools in kerman in 2007. 2008; 1-13 [Persian]
14. Taghizadeh Ganji A, Jafari A, Poorgholi N, Iranizadeh H. Evaluation of knowledge, attitude and practice of Tabriz's school health workers about oral and dental health. *Journal of Dental Medicine*. 2009; 22(3): 132-8. [Persian]
15. Mohamadian H, Eftekhari Ardebili H, Rahimi Foroushani A, Taghdisi MH, Shojaezade D. Evaluation of Pender's health promotion model for predicting adolescent girls' quality of life. *Journal of School of Public Health & Institute of Public Health Research*. 2011; 8(4): 1-13 [Persian]
16. Rahimi R, Fesharaki M, Sahebolzamani M, Rahmani A. The Efficacy of A Lifestyle Modification Course in Overweight Female Elementary School Students in Urmia, Iran. *Journal of Isfahan Medical School*. 2012; 30(188). [Persian]
17. Conceptual Explanation of Male Adolescents Lifestyle a Qualitative Research. *Iranian Journal of Nursing Research*. 2008; 2(7): 73-84.
18. Sarvestani RS, Jamalfard MH, Kargar M, Kaveh MH, Tabatabaee HR. Effect of dietary behaviour modification on anthropometric indices and eating behaviour in obese adolescent girls. *Journal of advanced nursing*. 2009; 65(8): 1670-5.
19. f Sefidi IS, S Shabestari Basir. the relationship between Dalir Sherkat achievement educational and adaptation social of Journal The. students dentistry Qazvin in. students dentistry Qazvin in Sciences Medical in Developing Instruction. 2013; 11(6): 10-1.

20. Hafezi F, EftEkhar Z, Vasidejad M. Comparison of motivational beliefs, self-regulated learning strategies and personality traits of gifted and ordinary high school students in Ahvaz. *New findings in psychology (social psychology)*. 2014; 5(16): 129-42. [Persian]
21. Mousavi-Moghadam S, Tavan H, Sayehmiri K, Nadery S. General health status of male and female students in junior schools of Ilam City in 2012. *Scientific Journal of Ilam University of Medical Sciences*. 2013; 22(2): 57-65. [Persian]
22. Comparison and development of terms in countries of country. review population World education ;2019.
23. Malekipour A, Mirjaleli SM. The Effect of School Health Educators Experience on the Orientation of School Health Education Programs: A Conventional Content Analysis. *Health and Development Journal*. 2019; 8(1): 83-99. [Persian]
24. de Sousa Eskenazi E, de Arruda Martins M, Ferreira Jr M. Oral health promotion through an online training program for medical students. *Journal of dental education*. 2011; 75(5): 672-8.
25. Esan A, Folayan MO, Egbedade GO, Oyedele TA. Effect of a school- based oral health education programme on use of recommended oral self care for reducing the risk of caries by children in Nigeria. *International journal of paediatric dentistry*. 2015; 25(4): 282-90.
26. Ghaffari M, Rakhshanderou S, Ramezankhani A, Noroozi M, Armoon B. Oral health education and promotion programmes: meta- analysis of 17 year intervention. *International journal of dental hygiene*. 2018; 16(1): 59-67. [Persian]
27. Yekaninejad MS, Eshraghian MR, Nourijelyani K, Mohammad K, Foroushani AR, Zayeri F, Pakpour AH, Moscowchi A, Tarashi M. Effect of a school- based oral health- education program on Iranian children: Results from a group randomized trial. *European journal of oral sciences*. 2012; 120(5): 429-37. [Persian]
28. Yazdani R, Vehkalahti MM, Nouri M, Murtomaa H. School- based education to improve oral cleanliness and gingival health in adolescents in Tehran, Iran. *International Journal of Paediatric Dentistry*. 2009; 19(4): 274-81. [Persian]
29. Rabi'i L, Mostafavi F, Masoudi R. Effects of family-centered interventions on empowerment of the elderly. *Journal of Health System Research*. 2012;8(2):301-13. [Persian]
30. Potter PA, Perry AG. *Fundamentals of nursing*. 2001
31. Rahai, Bidaki Z. Evaluation of a written teaching aid in health education: a case study of fluoride varnish. *Health and Health Magazine*. 2021; 12(2): 222-30. [Persian]
32. Williams AM, Muir KW, Rosdahl JA. Readability of patient education materials in ophthalmology: a single-institution study and systematic review. *BMC ophthalmology*. 2016; 16(1): 1-1. [Persian]
33. Zainab M, Mahnoush R, Marzieh M, et al. A comparative study of the effect of the educational intervention of the health belief model on two methods of web-based multimedia training and booklets on performing mammography in women of Bushehr city. 2022.
34. Sozangar S, Shahhosseini S. The effect of personal hygiene education through comic strip media on students' social skills. *Technology of Education Journal (TEJ)*. 2023; 17(2): 293-302.
35. Asghar Ka, Elmira Fak. The role of electronic education in improving the health awareness of young internet users (case study: female students of Allameh Tabatabai University).
36. Jamshidi-Gasemabadi, Makundi, Payam. Examining a model to evaluate the quality of teaching management skills through construction and management simulation style digital games; The subject of study is the teaching of systemic thinking as one of the required skills of urban management with an Islamic-Iranian approach through the SimCity computer game. *Iranian cultural research*. 2018; 41(11): 1-32.
37. Morteza J, Payam M. Investigating a model to evaluate the quality of management skills training through digital games of construction and management simulation style, the case study is system thinking training as one of the required skills of urban management with an Iranian Islamic approach through the Sim City computer game.
38. Nekoeimokadam M, Amiriosafi S, Ghorbani Bahabadi Z, Amiresmaili M. Role of charities in the

- health system: A qualitative study. *Journal of Qualitative Research in Health Sciences*. 2020; 2(1): 1-0.
39. Pakdaman M, Sari M, Montazeralfaraj R, Fallahzadeh H. Management Pattern of Health Benefactors' Collaboration in Medical Sciences Universities of Iran. *Journal of Community Health Research*. 2019.
 40. Bahare N, Hassan B. Identifying effective factors in the retention of intergenerational volunteers in charitable institutions (case study: charitable institutions in Shiraz). 2021.
 41. Chitsazian A, Sadeghikia MA. Public participation in social innovation. *Innovation Management Journal*. 2019; 8(1): 1-20.
 42. Raeisi P, Nasiripour AA. The mportance of Implementing Managerial Skills in Hospital Administration. *Journal of Health Administration*. 2002; 4(11): 71-80.
 43. Nejad S, Khorasgani S, Abadi Shatah, Badri. A qualitative study of the professional development factors of Iranian school principals. *Islamic lifestyle with a focus on health*. 2019; 3(5): 195-211.
 44. Shiri, Mojtahedzadeh, Rita, Ishrati, Baik, Dehdari. Investigating the effect of the e-learning course upon entering the service on the knowledge of health care workers in the field of family health care. his foot. 2023; 22(1): 39-49.
 45. Fatemeh and Younes and Leila Dar. Measuring the level of health literacy of primary health educators in Kerman city. 2021.
 46. Afravi S, Ghashghaeizadeh N, Hoseinpoor M. The relationship between the use of information and communication technology and the adaptive performance with the mediating role of psychological empowerment. *Information and Communication Technology in Educational Sciences*. 2017; 7(3 (27)): 63-82.