

## Designing a model of health literacy curriculum in elementary school (grounded theory)

### Article info

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#### Authors:

Najmeh Jafari  
Roozbahani 1  
Alireza Araghieh\*2  
Alireza Assareh3  
Mehdi Davaei4  
Hamid Moghaddasi5

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### Abstract

The purpose of the current research was to provide a curriculum model for health literacy in primary school. The research method was qualitative and grounded theory type. The data were collected through 20 semi-structured interviews of selected experts and elites with purposeful sampling, and were coded and analyzed in three stages. A model including 5 dimensions, 12 main categories and 26 sub-categories was presented and validated by members' check. The sub-themes that came under the causal conditions were: health-oriented society, change in lifestyle, industrialization of society, the emergence of various physical and mental diseases in society, movement from traditional literacy to modern literacy, attention to multiple knowledges, decay of knowledge. The sub-themes that came under the underling conditions were: involvement in health problems and students' need for information, parents' demand to provide health-related information and knowledge to students, teachers' demand to develop health-related knowledge in students, the needs of various institutions and organizations to equip students with up to date information and knowledge in the field of health. The intervening factors were: structural support and proper planning, proper investment, misplaced interventions in teaching health literacy to students, biased view toward health literacy, prejudice towards health literacy. The strategies included the following: using new methods in health literacy, using interdisciplinary education in health literacy, book-based education, memory-based education, one-dimensional education. The consequences were: improvement of personal health, promotion of healthy lifestyle, increase of health level in the society, reduction of costs caused by physical and mental diseases, encouragement to acquire knowledge in the field of health, reduction of intellectual poverty of children in connection with diseases. An inclusive curriculum that covers all the contextual, environmental, technical and informational dimensions related to health literacy was also identified as a central category.

**Keywords:** health literacy, curriculum, elementary school

<sup>1</sup> PhD student in Curriculum Planning Studies, Central Tehran Branch, Islamic Azad University, Tehran, Iran

<sup>2</sup> Associate Professor, Department of Educational Sciences, Islamshahr Branch, Islamic Azad University, Islamshahr, Iran.  
Corresponding Author: Alireza.araghieh@gmail.com

<sup>3</sup> Professor of curriculum studies, Faculty of human sciences, Shahid Rajaei University, Tehran, Iran

<sup>4</sup> Assistant Professor, Department of Educational Sciences, Central Tehran Branch, Islamic Azad University, Tehran, Iran

<sup>5</sup> Professor of Information Management and Medical Informatics, Department of Health Information Technology, Faculty of Paramedicine, Shahid Beheshti University of Medical Sciences, Tehran, Iran

## 1. Introduction

In today's era, the sudden spread of Corona virus from China to other countries as a global risk has attracted the attention of scientists, therefore, it has been acknowledged that the Covid-19 pandemic has been one of the most important health issues in Iran and the whole world (Mesgharpouramiri et al., 2019). With the spread of the corona virus in Iran, we witnessed behavior patterns that were contrary to the health patterns recommended by the centers of the headquarters to fight against the corona virus. This issue probably has historical and cultural roots. The problem can also be presented in this way: why do people not follow health recommendations (hygiene maintenance, home quarantine, etc.) and do not take them seriously? Considering the fact that about half of Iran's adults, especially vulnerable groups, have limited health literacy (Tavosi et al. 2014), the recommendations of the authorities regarding individual quarantine in such a society with low health literacy did not work and despite the recommendations Officials and the closure of schools and centers at the beginning of the outbreak of the corona virus, unfortunately, due to the lack of knowledge in relation to the factors affecting health by the majority of people in the society, this led to the presence of people in the society together with each other, the relocation of people and the transmission of pollution to other cities and The spread of the initial contamination center. The lack of information and the insufficient mastery of students and even adults on health skills led to a revolution in health education, because people with their health-oriented behaviors are able to play an important role in dealing with the spread of the corona virus. Health literacy does not only mean knowing health information, but an important part of this concept of health literacy means the ability to process information, make appropriate decisions according to the conditions, and understand the consequences of our own decisions and behaviors on the health of others and society. Therefore, a person who engages in such risky behaviors either does not have sufficient health literacy or does not have sufficient moral commitment towards his own health literacy; It seems that insufficient health literacy is the underlying reason for the occurrence of such high-risk behaviors in the context of the Corona crisis (Rahmani, 2019). Health literacy is an important determinant of health and has an important effect on health outcomes, encouraging people to participate and take action in their health care (Wood et al., 2021). In addition, health literacy improves health and well-being. While reducing health disparities, health literacy helps build individual and social resilience and allows people to make better health decisions and achieve higher levels of efficacy. Also, low health literacy is associated with more mortality, more depression, low adherence to medications, poverty, lack of education, and low economic and social status (Silva and Santos, 2021).

Health as an individual and social value, according to the statutes of the World Health Organization and from the point of view of all nations and schools, is considered one of the most important and basic human rights and needs. Achieving the highest level of health is one of the social goals in all governments (Lequez and Perez 2022). Every country predicts actions at the national level in order to achieve its expected health goals, and by drawing future prospects, examining and identifying its health needs, determining the challenges of this field, formulating strategies and macro approaches to designing practical plans. In this framework, education is very important as the center of gravity of development programs. A comprehensive health education program is designed to promote healthy living and discourage risky health behaviors among all students so that children take responsibility for their own health (Vermont Health Education Guidelines for Curriculum and Assessment 2010). Health is also mentioned as one of the operational goals in the Fundamental Transformation of Education document. This goal is to educate students who, by understanding the concepts of personal and social health and the issues of natural and urban ecology as divine trusts, have the ability to maintain and improve personal health and environmental health. So that they respond to the physical and mental needs of themselves and society based on the principles derived from the Islamic standard system with healthy individual and group sports and recreation. (fundamental transformation document of education, 2019). The position of health literacy in the current curriculum is also stated as follows: health and well-being is one of the essential needs of human beings. This concept, which from the point of view of the World Health Organization means physical, mental and social well-being, has always been the focus of various policy makers. Fortunately, the policy makers of the education system have also paid attention to the importance of health. They believe that if this system wants to achieve its ultimate goal, which is "the

realization of good life", it should not neglect the aspect of health. Therefore, one of the basic dimensions of education is the biological and physical dimension; The dimension, which has directly focused on health promotion (fundamental transformation document of education, 2019).

In the national curriculum document, the topic of health is also discussed, but only the criteria are stated and no model or framework has been established. One of the fields of training and learning in this document is the field of training and learning health and physical training. In Islamic teachings, the human body is considered a divine gift and trust for the evolution of the soul. Protecting the body from dangers, injuries and strengthening the body and maintaining health is a religious and divine duty. Health and physical training is a fundamental and effective factor in personal, social, cultural, educational and economic development and is an essential tool for the growth and development of healthy and capable people in order to achieve aspects of a good life. Acquiring basic qualifications in this field enables students to know their physical, mental and psychological capacities, trust them and be diligent in developing them. These teachings help students to take responsibility for their health and to believe in their role in ensuring physical and mental health and individual and social vitality, especially family health. During sports and physical activities, students learn how to work in a group, increase their self-confidence, plan their free time and get involved in problems and solve problems with the help of others. Health and hygiene leads to complete physical, mental, social, and spiritual well-being and the prevention of diseases and injuries and physical and movement disabilities, and empowers a person to master his behavior and maintain his health, and prevent risky actions and improve the lives of students. (fundamental transformation document of education, 2018).

According to the above evidence and the importance of health literacy, schools are considered as the most important tool for developing the mission of education in the matter of health education in any society, especially in our country. Schools can be considered as the best base for teaching new health information to parents and students, in fact, schools are the widest channel for spreading health information and creating new health attitudes and behaviors in society (Sharma, 2021). Because a large amount of the country's young population is made up of students who spend about 12 years of the best time of their lives in schools. As a health messenger, they can convey their learning to the family and community (Yilimaz et al., 2020). School is the only social institution that is universally accessible to most children and adolescents. Therefore, it is responsible for teaching children and young people to create correct and fundamental habits and attitudes for a healthy life. What a child learns has a deep and lasting effect on his happiness, beliefs and behavior in future life. Therefore, no student should leave school without learning new information about mental health and physical development. It is the right of every child to learn the skills necessary to live a healthy life. Therefore, the school can be seen as one of the influential institutions that provide important skills for living in the future (Jacob et al., 2021).

Considering that many healthy behaviors are institutionalized during childhood, schools are an ideal environment for promoting health literacy and can provide a positive platform for this important matter (Fernet et al., 2021). Children spend a large part of their time in school, so schools have the potential to have a powerful impact on children's health (Langford et al., 2014). Schools can play a very important role in improving children's health, which will lead to them becoming healthy adults (Castro et al., 2014). Curriculum plays a key role as the pillar of any education system. Students learn values and life skills through various curricula and apply them in adult life. For this reason, health education provides this opportunity to education specialists, teachers and students to acquire knowledge, information and skills that will lead them to proper health habits and behavior throughout their lives. Therefore, it is inevitable to design curricula in accordance with the development of health and hygiene skills in general education courses for students. Based on this, the problem of this research is to design a model of health literacy curriculum in elementary school.

## **2. Methodology**

In the present study, the grounded theory method has been used. To answer the research questions, semi-structured interviews with research sample people who had valuable lived experiences related to the research topic were used. Data collection continued until theoretical saturation and 20 interviews were conducted. The participants consisted of experts who were knowledgeable in the field of health literacy and could provide valuable information to the



			of microbes - awareness and understanding of the importance of health and environmental health - awareness and understanding of the body's function against diseases, correct perception Content, reasoning and inference, understanding the relationship between content, evaluating and judging, observing and collecting information and data.
underling conditions	3. The needs of students, parents and teachers	<p>3-1 .Involvement in health problems and the need for information in students</p> <p>2-3 :Requesting parents to provide information and knowledge related to health to students</p> <p>3-3 .The demand of teachers to cultivate health-related knowledge in students</p> <p>3-4. The need of various institutions and organizations for students equipped with up to date information and knowledge in the field of health</p>	Incidence of diseases at a young age, wide spread of viral diseases, little information of parents in relation to health, occurrence of various diseases in school, non-observance of health-related issues in school, attention to the diverse characteristics of children in health matters, attention to equipped students with up to date knowledge in the field of health, parents' sensitivity towards students' personal health, teachers' attention to issues including health habits
intervening factors	<p>4. Structures and policies</p> <p>5. Worldview</p>	<p>4-1 .Structural support and mutual planning</p> <p>4-2. Proper investment</p> <p>5-1 .Improper interventions in teaching health literacy to students</p> <p>5-2 .A biased view towards health literacy</p> <p>5-3. Prejudice towards health literacy</p>	Health communication bridge between home and school, improving investment in the field of health information, providing technical and technological infrastructure, using an experienced health educator, systematic learning in the field of health, macro policy making, avoiding a skeptical look at health education. , bigoted attitude towards teaching health issues especially sexual issues, personal and non-scientific view of health literacy, cumbersome rules in health education

<p>strategies</p>	<p>6. Flexible and receptive approach</p> <p>7. Pessimistic and dismissive approach</p>	<p>6-1 .Using new methods in health literacy</p> <p>6-2 .Use of interdisciplinary education in health literacy</p> <p>6-3. Book-based education</p> <p>7-1 .Memory-based learning</p> <p>2-7.one-dimensional training</p>	<p>Avoiding lectures in health education, special lessons for health education, avoiding the prescriptive method in health-related education, using multiple information sources in teaching health-related issues, avoiding a simplistic view in the field of health literacy, using behavioral models. and functional in health education, using modeling methods, using storytelling and crafts in health education, paying attention to the age of students in health-related education, using images, preparing educational clips, preparing short stories, recognizing the components body, distance from traditional education in health and health, joint efforts in health education, multidimensional and interdisciplinary view of health, group participation in learning health issues, avoiding political work in health education, avoiding a skeptical look to health education, a dogmatic attitude towards the education of health issues especially sexual issues, paying attention to new methods in health education, avoiding pure theoretical methods in the education of health issues, continuous and multi-dimensional education, paying attention to encouraging methods in health education and health, justifying parents in the field of health education to children, paying attention to the realities of society in health education, using traditional and outdated education methods in health education, ignoring the environmental and family conditions of children, relying too much on mass education in</p>
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consequences	<p>8 .Individual</p> <p>9 .social</p> <p>10 .Economic</p> <p>11. Scientific</p>	<p>8-1 :Improving personal hygiene</p> <p>2-8 :Improving healthy lifestyle</p> <p>1-9 :Increasing the level of health in society</p> <p>10-1 :Reduction of expenses caused by physical and mental diseases</p> <p>1-11 :Encouraging knowledge gathering in the field of health</p> <p>2-11 .Reducing intellectual poverty of children related to diseases</p> <p>3-11: Collective cooperation in health-related issues</p>	<p>Understanding nature and its role in health, understanding the relationship between man and the universe and its role in health, awareness of healthy lifestyle, awareness of good and bad nutrition, awareness of diet, avoiding prescriptive methods in health-related education, awareness of nutritional information of food items, awareness of physical diseases, awareness of mental illnesses, awareness of healthy pleasure, responsibility for the health of others, awareness of health risk factors, awareness of the properties of food and medicinal plants, awareness of the side effects of drugs, awareness and analysis of physical condition, promotion of healthy eating style, fostering people's responsibility towards health and social health, knowing the indicators of physical and mental health and environmental health, following a healthy lifestyle, maintaining mental balance and creating an environment peaceful things, maintaining the balance of human relations with nature, maintaining the balance of human relations with other human beings, understanding the nature and nature of health, group participation in learning health issues, mental revolution in relation to health and hygiene, expanding children's thinking horizons in the mode of mental health and physical, increasing the physical and mental well-being of children, experiential learning, promoting self-achievement, understanding physical and mental strengths and weaknesses, increasing the</p>

		ability to deal with physical and mental problems, improving health, increasing mental health, improving coping skills Physical and mental problems, communication and constructive interaction with others, stress management, disease prevention. , awareness of types of pollution, sensitivity to health, health awareness, improvement of health attitude, improvement of one's skills, knowledge about types of drugs, health habits, increasing awareness in the field of mental health, increasing awareness in the field of physical health, developing competence health practices, practical knowledge of health, adequate knowledge of the body.
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**Causal conditions:** In the grounded theory approach, causal conditions refer to factors or events that lead to the formation of a central phenomenon or category (Creswell, 2011). Based on the data obtained from the current research, the factors that lead to the attention and formation of the health literacy curriculum can be categorized as follows:

**Health-oriented society:** Paying attention to health in today's society has become one of the necessities of human life. One of the participants in this regard states that:

*Unfortunately, in this century, physical and mental problems are increasing strongly. If we do not have the necessary skills to deal with these problems, we will be in trouble. The school, as the beating heart of education, should be able to educate students in this field. (Participant No. 3)."*

**Change in lifestyle:** Lifestyle in the modern world has undergone fundamental changes, which has doubled the need for health awareness. One of the participants in this regard states that:

*"What we are witnessing in this century is a sedentary lifestyle without activity, fatty and high-calorie foods, eating late at night, and children are not active enough, and there is no exercise in the family. All these things require awareness and the only way to deal with them is an increase in literacy in the field of health (Participant No. 13)."*

**Industrialization of society:** The development and emergence of various industries has made attention to health more prominent. One of the participants in this regard states that:

*"Everywhere you visit, you will see that a factory has been established, so these factories also have the destructive effects of pollution and damage to the human body (participant number 19)."*

**Emergence and manifestation of all kinds of physical and mental diseases in the society:** The emergence and severity of physical and mental diseases in this century is more obvious than any other time. In this regard, one of the participants states that:

*"Unfortunately, all types of cancer are spreading in society, mental illnesses such as depression and obsession are increasing, in such a situation, if we are not equipped with the skills to deal effectively with these diseases, we will definitely suffer a lot. To be equipped with these skills, we must definitely receive the necessary education in the field of health through a special school and curriculum (Participant No. 5)."*

**Moving from traditional literacy to modern literacies:** The concept of literacy has undergone extensive changes in the past few decades and has moved away from memory-centeredness. One of the participants in this regard states that:

*"In the past, if someone knew how to read and write, he was considered literate, but today the situation is different,*



*if a student does not have emotional literacy, political literacy, economic literacy, and health literacy, he cannot be considered literate (Participant No. 17)*

**Paying attention to multiple knowledges:** knowledge has various dimensions, which attention to it, especially in the field of health, is one of the necessities of the present age. One of the participants in this regard states that:

*"In the past, learning math and science was very important, but will a student today be successful if he only knows math and science? In today's complex world, we need a student who, in addition to math, has the ability to understand and evaluate information related health and... (Participant No. 10)."*

**Deterioration of knowledge:** the current world is called the age of half-burnt information, that is, a world where knowledge has a short life and must be updated continuously. In this regard, one of the participants states that:

*"The knowledge that we provide to students in the field of health is not absolute knowledge, but it may become invalid after some time. This issue leads us to think about the health literacy curriculum so that we can update it every few years to educate the students. (Participant No. 14)."*

**underling conditions:** underling conditions mean specific factors that originate from the central phenomenon and affect the adopted strategies (Creswell, 2011). The data from the present study showed that underling conditions can be categorized as follows:

**Involvement in health problems and the need for information in students:** School is one of the places where health-related problems are abundantly seen. One of the participants in this regard states that:

*"When children enter school, they leave the supervision of the family, especially the mother, and it is very important that they have their own supervision, and this can only be achieved with health literacy (Participant No. 19)."*

**Parents' demand to provide information and knowledge related to health to students:** In the last decade, the attitude of parents has changed from the mere teaching of some subjects to the preparation of students for a healthy life. One of the participants in this regard states that:

*"Fortunately, parents are no longer just looking for their children to know English or to be good at math, but they want their children to be capable enough to lead a healthy lifestyle in the society, that's why the demand of parents for teaching health-related matters is increasing (Participant No.2)."*

**Teachers' demand to develop health-related knowledge in students:** Teachers are also among the people who want to develop health-related skills in students. One of the participants in this regard states that:

*"With the increase in teachers' education on the one hand and their direct involvement with the conditions of students, both physical and mental health, on the other hand, the tendency of teachers to provide information and teach the right lifestyle is increasing (Participant No. 6)."*

**The need of various institutions and organizations for students equipped with current information and knowledge in the field of health:** Today, most government institutions and organizations are looking for responsible citizens with mental and physical health. One of the participants in this regard states that:

*"If you take a close look at the society, you will realize that citizens with little knowledge and skills in various fields, including health and hygiene, cannot benefit from the services of institutions and organizations, so the development of health-related literacy is an essential need for living in such a society (Participant No. 18)."*

**Intervening factors:** Intervening factors are factors that influence the choice of strategies (Creswell, 2011). Based on the data of the present research, these factors can be categorized as follows:

**Structural support and appropriate planning:** Organizational structures play an essential role in developing health literacy programs. One of the participants in this regard states that:

*"If the school tries to teach health literacy in the best possible way, but there is no proper planning at the organizational level and the existing structures do not support these programs, there is no doubt that the desired result will not be achieved. As a result, the first step to implement this plans are to have a proper macro policy, then based on this macro policy, we can plan for each stage. (Participant No. 14)."*

**Appropriate investment:** Financial support for programs related to health literacy is one of the necessary requirements in this field. In this regard, one of the participants states that:

*"Financial support and appropriate budget injection will make all the beneficiaries have more motivation to participate in such programs and it will be formulated and implemented more effectively (Participant No. 8)."*

**Inappropriate interventions in teaching health literacy to students:** non-professional interventions in health literacy have led to many problems in this field. One of the participants in this regard states that:

*"One problem is that every teacher has a definition and an idea of health, and some of these definitions are the result of our personal experience and knowledge (participant No 10)."*

**Biased view of health literacy:** a view full of suspicion is one of the problems in the field of health literacy for students. One of the participants in this regard states that:

*"Some people immediately act bigoted when discussing new issues such as health literacy, especially sexual and mental health, and pretend that there is no problem in this field and there is no need for education at all (participant No 5)."*

Designing a model of health literacy curriculum...

**Bias towards health literacy:** Unfair and outside scientific criteria is another important issue in the field of health literacy. In this regard, one of the participants states that:

*The school's duty is to test all different opinions and move towards scientific thinking. Unfortunately, despite the many damages it caused to us, the corona pandemic also brought a pure experience in front of our eyes and we witnessed that unscientific beliefs disappearing (Participant No 11)."*

**Strategies:** Strategies are the actions and reactions that people show in front of a central phenomenon (Creswell, 2011). The data from the present research showed that strategies appear as follows:

**Use of new methods in health literacy:** One of the methods of developing health literacy in children is the use of new educational methods. One of the participants in this regard states that:

*"If we want the concepts and skills related to health to be well institutionalized in the minds of students, new methods should be used, for example, virtual space, movies, images, field trip and games should be used for health education. (Participation) No. 17)."*

**Using interdisciplinary education in health literacy:** Using other sciences in teaching health literacy to students leads to positive results in this field. One of the participants in this regard states that:

*"I think that dedicating a special lesson or a special course to an important topic such as health does not lead to very positive results, we should be able to use art, sports, mathematics, literature and other subjects to teach concepts related to health" (participant no. 8).*

**Book-based education:** One of the non-constructive approaches to health literacy is relying on books and transferring its contents to students. One of the participants in this regard states that:

*"Unfortunately, some people involved in this field think that by compiling a book on health and transferring its content to students, they can improve their health literacy. I have said many times that we want the behavior of the students, not We want to increase the information of memorization, we want it to be reflected in the student's life (Participant No. 6)."*

**Memory-based education:** Relying solely on memorizing health concepts is another destructive approach to health literacy. One of the participants in this regard states that:

*"Some teachers think that it is possible to teach new things such as life skills, media literacy, and health literacy, like in other lessons, and give a lecture to the class and then test the students to determine how well they memorized these materials. (Participant No 3).*

**One-dimensional training:** emphasizing some specific aspects of health is another non-constructive method in this field. One of the participants in this regard states that:

*"Most of the programs that have been implemented in this field were one-dimensional, for example, only emphasizing physical or mental problems, while there are skills such as communication with others, communication with the environment, communication with the world, and many other things which should be included in these types of programs (Participant No 9)."*

**Consequences:** Consequences are intended or unintended results from the use and adoption of strategies (Creswell, 2011). Based on the data obtained from the current research, these factors can be categorized as follows:

**Improving personal health:** Improving personal health is one of the outcomes of the health literacy curriculum. One of the participants in this regard states that:

*"If schools are able to raise the awareness and literacy of students in the field of health, there is no doubt that students will take more care of themselves and as a result, they will gain more physical and personal health. (Participant no. 15).*

**Promoting a healthy lifestyle:** having a healthy lifestyle is another result of health literacy. One of the participants in this regard states that:

*"Well, it is clear that if a person has a high level of health awareness, she tries to protect her health and therefore goes to exercise and healthy nutrition and optimizes her lifestyle (participant no 5)."*

**Increasing the level of health in the society:** expanding the level of health in the society is another consequence of the health literacy curriculum. In this regard, one of the participants states that:

*"We can consider school as a place where if students are well educated about issues such as health, they will enter the society as desirable elements, for example, if they have good health literacy, they will lead to the spread of health in the society, and if lessons under the title of "caregivers "Health" should be implemented in all schools, without a doubt, it can have a tremendous impact on the health of the society, and when you have a healthy society, you will certainly progress scientifically, industrially, and economically. (Participant No. 16)*

**Reduction of costs caused by physical and mental diseases:** reduction of disease and as a result reduction of costs for disease treatment is another consequence of having health literacy. One of the participants in this regard states that:

*"When students have correct information about health and learn to live properly, without a doubt, many diseases will decrease in the population of millions of students today and citizens of tomorrow, and the costs in this field will*

also decrease (Participant No. 11). "

**Encouraging the acquisition of knowledge in the field of health:** being interested in knowledge and research in the field of health is another outcome of the health literacy curriculum. One of the participants in this regard states that:

*"Many students show enthusiasm in this field when they learn about health issues and various diseases and contaminations. I think it is possible to invest in these students and prepare them to become future specialists. (Participant No. 7). "*

**Reducing intellectual poverty of children related to diseases:** increasing the level of knowledge related to health is another result of health literacy. One of the participants in this regard states that:

*"Unfortunately, many of our students at the family and community level are not familiar with health issues and especially diseases, which the school can eliminate this intellectual poverty with proper curriculum and education. The relationship between the family and the school should be such that they cover each other, the families should not only be aware of what is said in the school, but they should also actively participate in it. The relationship between the school and the family should be such that the education that the student receives is implemented in the context of the family, and the school should be able to convey this information to the home as well (Participant No. 18).*

**Collective cooperation in health-related issues:** Synergy and group participation to promote health-related programs is another result of equipping students with health literacy. One of the participants in this regard states that:

*"If at school, students are well explained about the importance and sensitivity of health and hygiene and get rich information in this field, they will definitely transfer this information to their home environment, and in this way, both the students and their families in are justified and, for example, if the government wants to implement a plan and program in this field, they welcome it with open arms (Participant No. 13)."*

Based on the research findings, the conceptual model presented in the figure below shows the relationships between the main categories resulting from the qualitative analysis process.

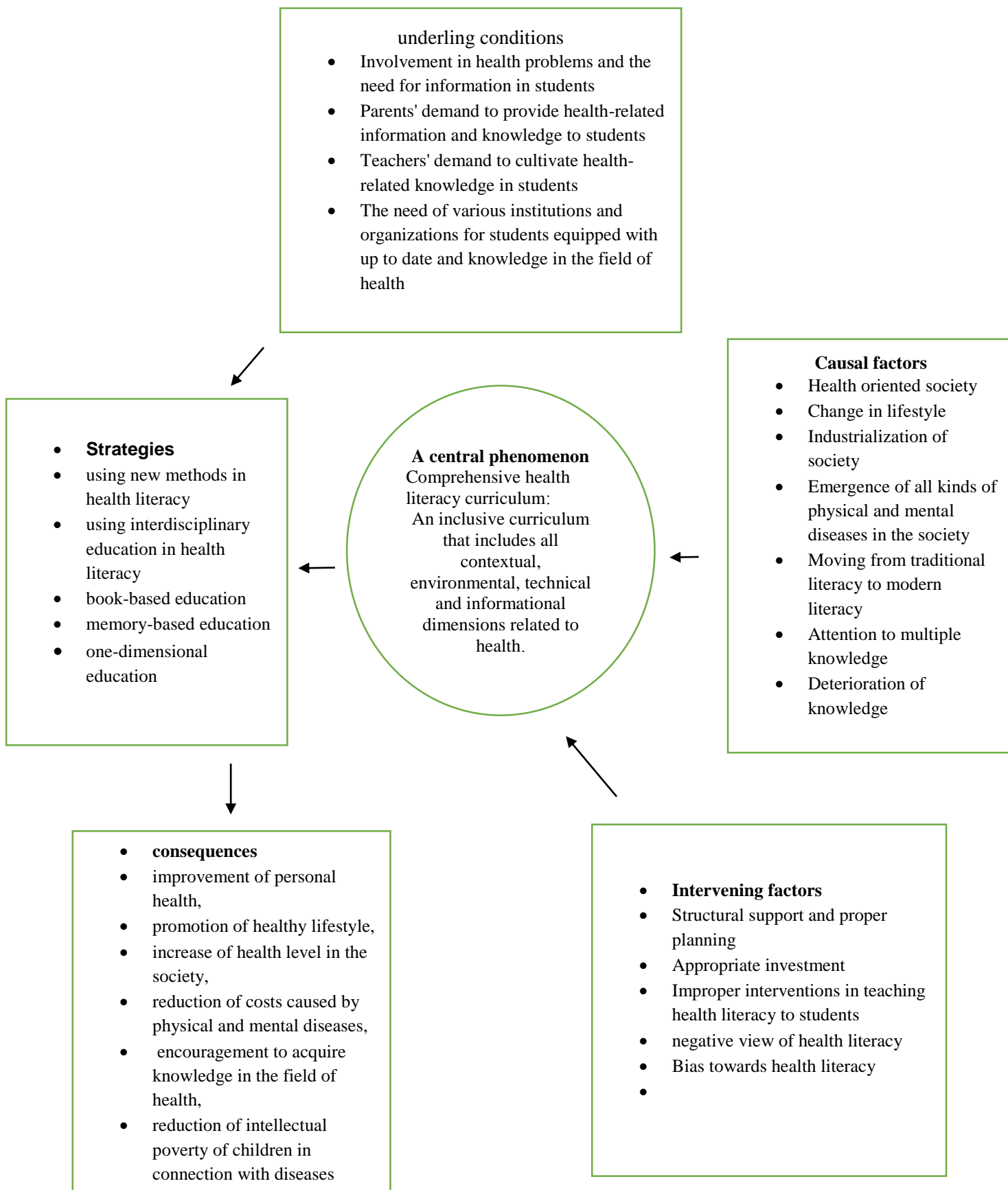


Figure 1: Health literacy curriculum model

#### 4. Results and Discussion

The main focus of the current research was on the health literacy model. The results of the current research indicated that the health literacy curriculum can be explained in the form of factors such as causal, interventional, underling, strategies and consequences.

The first influential category in the health literacy curriculum was causal conditions, which include things such as a health-oriented society, changes in lifestyle, industrialization of society, the emergence and occurrence of various physical and mental diseases in society, the movement from traditional literacy to modern literacies, attention to multiple knowledges, knowledge deterioration. In this regard, Wood et al. (2021) state in a research that education related to health and hygiene in society has grown more than 4 times in the last decade. These trainings are not specific to the university and have been extended to other institutions, including schools, so that many schools have developed and implemented their own special programs to equip students with health-related skills. The next influential item in the field of health literacy is lifestyle. The lifestyle has undergone extensive changes and transformations in the past years, which has doubled the need to pay attention to health literacy. For example, Verdosi et al. (2021) found in a research that more than half of adults have sedentary lifestyle and many people suffer from overeating or malnutrition. These researchers believe that having a healthy lifestyle in adulthood is directly related to education in childhood and school, which means that teaching the necessary skills and equipping with basic skills in this field increases the chances of a healthy life in adulthood.

The second influential category in the health literacy curriculum is the underling conditions, which include cases of involvement in health problems and the need for information among students, parents' requests to provide information, etc. in the field of health. In this regard, Butler, Burns and Robinson (2021) in a study investigated the willingness of high school students to receive health information and learn health-oriented skills, the results of this study indicated that more than two-thirds of students wanted to obtain information about the types of diseases and ways to prevent them. The next important factor in health literacy is parents. Many parents do not have accurate information about their children's health conditions, and on the other hand, they get confused when their children get sick, this issue has increased the demand of parents to educate their children about health. Mantans and Williams (2022) state that parents believe that providing education in the field of health fills their information gap in this field, because by equipping students with the necessary knowledge and skills in the field of health, their responsibility in this field is reduced. Of course, some parents also believe that only education at home cannot provide complete information on health to children, so school education in this field appears in a complementary role and causes the effectiveness of education. that provide inside of the house.

The third influential category in the health literacy curriculum is intervention factors, which include things such as structural support and proper planning, proper investment, misplaced interventions in health literacy education, etc. The support of various structures and appropriate investment are factors that have an important impact on the health literacy curriculum. Basically, any program without comprehensive structural support and lack of financial injection will fail. Many educational experts believe that the point of harm of new curricula such as health literacy is the lack of financial support and proper budget allocation. On the other hand, if the compiled plans are not supported by different layers of the organization, it cannot be expected to have much success. In this regard, Jacob et al. (2021) believe that many new educational approaches and programs, due to neglecting organizational alignment with their goals, lead to the formation of hidden resistance forces against themselves, for the sake of many benefits in the organization see such programs as contrary to their ideals and sometimes even in conflict with their interests. The next point mentioned by the above researchers is the lack of proper allocation of funds to programs such as health literacy and as a result its ineffectiveness because the beneficiaries of such programs, for example teachers, expect in addition to support the spiritual ones should be financially encouraged to implement such programs, on the other hand, the lack of adequate funds to provide facilities for the effective implementation of the health literacy curriculum poses a problem. The next interfering factor in the health literacy curriculum is non-professional and misplaced interventions in this type of curriculum. Entry of non-professionals into educational programs is one of the important problems and challenges in the field of education. Non-expert interventions in curriculum development have serious damaging results. Abbasi et al. (2018) found in a research that one of the main

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causes of failure and ineffectiveness of educational programs is the entry of non-experts and the application of tasteful opinions far from scientific foundations.

The next influential categories in the health literacy curriculum are strategies, which include items such as the use of new methods in health literacy, the use of interdisciplinary education in health literacy, book-based education, etc. How to deal with the health literacy curriculum is another important and influential item in this field. The results of the current research indicated that the way of encountering the health literacy curriculum can be in two forms of accepting or rejecting. The use of new educational and interdisciplinary methods is part of the receptive approach to health literacy curriculum. Health literacy is a new and emerging topic in the field of education, so the use of traditional methods in this education will not be very successful. It can be said that teaching health literacy is not an issue that can be transmitted by providing pure information and lectures, since students must apply this type of literacy in all aspects of their lives, so it should be viewed from a multifaceted perspective. Simply presenting a lesson and naming it as health literacy will not result. Such education should be related to other subjects such as art, sports, literature, etc. Teaching health literacy with such lessons is more attractive and practical and without a doubt, it engages students more and increases their desire in this field. In this regard, Front et al.(2021) in an experimental research compared traditional and new educational methods in conveying health concepts to students, the results of this research indicated that there is a significant difference between the control and experimental groups in this field. So that the experimental group scored more than the control group.

The next important dimension in the health literacy curriculum was consequences. The consequences included items such as: improvement of personal health, improvement of healthy lifestyle, increase of health level in the society, etc. In this regard, Karimi et al.(2018) have conducted a research titled "The role of health literacy and background variables in determining health promoting behaviors in secondary school girls in Tehran" ,the results of the research showed that items such as health literacy, interest to the health issues, reading magazines and newspapers, father's education, body mass index, field of study, are the first source of health information and had a direct and meaningful relationship with health-promoting behaviors. In other words, health literacy has been associated with the promotion of personal health and healthy lifestyle. Yaser Arafat and colleagues (2020) have conducted a research entitled "Health literacy in school". In this research, it has been stated that health literacy is one of the main elements of patient-centered health care. Poor health literacy is a silent epidemic across the globe as it affects all aspects of health. Schools play an important role in increasing health literacy. Improving health literacy during adolescence is thought to improve later life because adolescents need it to continue their modified behavior throughout life. One of the important consequences of health education and health literacy is the reduction of costs related to the treatment of diseases. Every year, a huge budget is injected throughout the country to treat diseases in the country's healthcare system, if many diseases can be prevented by having the necessary health skills. Sharma (2021) believes that the correct education of health principles and the necessary awareness in the field of health can reduce one third of the diseases of a society and, as a result, reduce the costs related to treatment. Reducing the intellectual poverty of students toward issues such as self-care, collective health, environmental health is one of the other effects of health literacy. In general, health literacy can bring great achievements for the individual and the society, and these achievements can be seen in a range of issues such as lifestyle, disease prevention, a sense of responsibility for the health of others, etc.

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