

School health and its role in promoting a culture of health in Algeria

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summary :

School health is a vital element in building a healthy and educated society, playing a fundamental role in promoting health awareness among students in Algeria. School health focuses on providing a healthy and suitable learning environment that enhances students' physical and mental well-being and contributes to improving their academic performance in Algeria. Educational institutions are a suitable arena for raising awareness about health concepts and the importance of disease prevention through educational programs and awareness initiatives covering topics such as healthy nutrition, physical activity, and mental health. The Ministry of National Education, in collaboration with the Ministry of Health, is working to integrate school health programs into the educational curriculum, contributing to the development of a generation that is aware and capable of making sound health decisions. These efforts aim to reduce health risks that young people may face, such as obesity, smoking, and infectious diseases, by promoting healthy habits and developing positive behaviors from an early age. In this way, school health contributes to building a comprehensive health culture that improves the quality of life for individuals and society as a whole in Algeria.

Health, school, school health, health culture, Algeria

First: The problem

School health is a fundamental pillar in promoting health awareness among younger generations, significantly contributing to educating students about the importance of maintaining health and taking appropriate preventative measures to avoid illness. Despite the efforts of educational and health institutions in Algeria to improve school health, the challenges facing these programs make it difficult to achieve the desired goals in this area. School health represents a significant opportunity to promote health awareness and positive behaviors among young people, but a lack of financial resources, weak infrastructure, and the absence of comprehensive health programs hinder this. Many schools, especially in remote areas, lack adequate health facilities, which weakens the educational system's ability to provide a safe and healthy environment. Furthermore, the resources allocated to these programs are often insufficient, leading to significant disparities in the level of health services between different regions and consequently depriving a large segment of students of the basic healthcare they deserve. This leads us to the following key question:

How can school health programs be improved to promote a culture of health among students in Algeria?

From this, the following sub-questions can be raised:

- 1- What are the main factors that affect the effectiveness of current school health programs in Algeria?
- 2- How can school curricula be developed to include public health and proper nutrition concepts more comprehensively?
- 3- What is the role of specialized health personnel in schools in promoting health awareness among students?

Second: Hypotheses

To answer these questions, we started from the following hypotheses:

- 1- Inadequate funding for school health programs reduces their effectiveness.
- 2- The lack of awareness among some students and families about the importance of school health negatively affects the implementation of health programs.
- 3- School health programs promote positive health habits among students when implemented regularly.

Third: The importance of the study

The importance of the study lies in the following:

- 1- Improving the health of individuals: By promoting a health culture in schools, the health of students and school staff can be improved, thereby reducing disease rates and improving their quality of life.
- 2- Awareness and Education: This study contributes to raising awareness among individuals about the importance of health and disease and injury prevention, and educating them about healthy behaviors that they can follow.
- 3- Reducing the cost of healthcare: By promoting health culture and disease prevention, the costs associated with treatment and necessary healthcare in the future can be reduced.
- 4- Enhancing discipline and academic focus: Improving students' health can lead to improved discipline and academic focus, which may positively impact their academic performance.
- 5- Reducing the spread of infectious diseases: Promoting school health can reduce the spread of infectious diseases among students and staff in schools and thus contribute to maintaining their safety and health.

Fourth: Study Objectives

Our study aims to:

- 1-Analyzing the role of school health in promoting health culture in Algerian schools and evaluating its effectiveness.
- 2- Understanding the challenges and obstacles to implementing school health programs in Algeria and identifying the factors that affect their successful implementation.
- 3- Exploring best practices and successful experiences in the field of school health in Algeria and abroad, and analyzing how to adopt and apply them in the Algerian context.
- 4- Providing recommendations and suggestions to enhance the role of school health in promoting health culture in Algeria, including developing health policies and programs and training staff in schools.

5- Improving cooperation between stakeholders in the health and education sectors, and ensuring the integration of efforts to achieve school health goals in Algeria.

Fifth: Reasons for the study

Some of the reasons for choosing this topic include the following:

1- The impact of health status on academic performance: The health status of students is considered one of the factors affecting their academic performance, and therefore, promoting a health culture in schools can contribute to improving student performance.

2- Reducing the rate of infectious diseases in schools: The presence of many students in one place increases the transmission of infectious diseases among them. Therefore, educating students about hygiene and disease prevention can reduce the spread of these diseases.

3- Promoting healthy behavior among students: By guiding students towards healthy and proper behaviors, their health culture can be enhanced and they can be encouraged to follow healthy lifestyles.

4- Providing a safe and healthy environment in schools: The role of school health is essential in ensuring a safe and healthy environment for students, and therefore studying this topic can contribute to improving the health environment in schools.

5- Improving community awareness of the importance of health: By focusing on the role of school health, it is possible to increase community awareness of the importance of health and the need to pay attention to it, and thus motivate the community to support the efforts made in this regard.

Sixth: Study Concepts

1- The concept of school health:

A-First: School health is a set of activities and services aimed at improving the health of students and teachers in the school environment, with the goal of promoting students' physical, mental, and social development. School health includes awareness programs, providing a healthy and safe school environment, along with early detection and basic healthcare services, which contribute to improved academic achievement and enhanced overall student well-being.

B- Terminologically: It is a set of concepts, principles, systems, and services provided to promote student health in schools and to promote community health through schools. School health is not an independent discipline but rather a synthesis of a range of general health sciences and knowledge, such as preventive medicine, epidemiology, health education, biostatistics, environmental health, nutrition, oral and dental health, and nursing.

C-Procedural: This refers to a set of organized activities aimed at ensuring the health and safety of students in educational institutions, including:

Health assessment: Undergo regular health check-ups

Providing health services: offering medical care and first aid

Health education: Implementing educational programs on health and nutrition topics

Prevention and vaccination: Organizing vaccination campaigns and raising awareness about diseases

Psychological support: Providing counseling and psychological support services

Healthy nutrition: Providing balanced meals

Coordination with the community: Collaborating with parents and the community to promote health awareness.

2- The concept of health culture:

A-Primary: This refers to a set of knowledge, behaviors, and practices related to health and well-being, aimed at promoting quality of life and preventing disease. Health culture includes awareness of health issues such as proper nutrition, physical activity, and disease prevention, as well as an understanding of the impact of social and environmental factors on health.

B-Terminologically: Health education is considered the effective means and main tool in developing health awareness for the individual and society. The health education process is based on scientific and practical foundations because of its role in raising the level of public health in society. Therefore, this process has received increasing attention from modern doctors and scientists. Health education is not done merely by spreading health information included in a health seminar or health booklets, but the goal of health education is to change health habits, attitudes, concepts and practices.

C-Procedural: This is a set of measurable criteria that define individuals' knowledge and health behaviors, including:

Knowledge: Information about health and nutrition

Behavioral factors: practices such as exercise and proper nutrition

Readiness: Individuals' willingness to change their health habits

Participation: Individuals' involvement in health programs

Values: Beliefs that influence health decisions

3- The concept of health programs:

A-First: These are initiatives aimed at promoting students' physical, mental, and social well-being within the educational environment. These programs include a variety of activities and services, such as health awareness sessions on nutrition, personal hygiene, and physical activity, as well as providing basic medical care such as checkups and vaccinations, and supporting mental health through counseling and positive activities. These programs contribute to creating a safe and healthy school environment and support students' academic achievement, thus enhancing their ability to learn and grow in a healthy way.

B- Conventional: This refers to the program adopted by the school to protect and improve the health of its students and staff. The school has multiple responsibilities in the event of a student's sudden illness or an accident that occurs at school or while participating in school-related activities. First, the school must provide first aid and necessary care, and inform the student's guardian. The school must also transport the student home or to the hospital for treatment. Therefore, the school administration must prioritize the health and safety of students and provide them with the knowledge and information on how to maintain their physical and overall health, enabling them to learn and continue their studies effectively.

C. Procedural: This refers to a set of activities and services aimed at promoting the general health of students and staff within the school environment. These programs include health awareness initiatives that contribute to spreading a culture of hygiene and healthy nutrition, in addition to providing regular checkups to detect potential health problems such as vision

impairment and dental issues. School health programs also include organizing vaccination campaigns to prevent infectious diseases, providing first aid for emergency injuries, and offering healthy meals in the school cafeteria. These programs work to build a safe and supportive environment that contributes to improving students' general health and enhancing their academic performance, thus reducing absenteeism rates and improving their educational experience.

4- The concept of disease prevention:

A-Primary: This refers to a set of actions and practices aimed at protecting health and reducing the likelihood of developing diseases before they occur. These actions include maintaining personal hygiene, proper nutrition, vaccinations, physical activity, regular checkups, and avoiding harmful behaviors such as smoking and excessive alcohol consumption.

B- Technically: This refers to the set of measures and procedures taken to limit the spread of diseases or reduce the risk of contracting them. Prevention includes promoting healthy lifestyles, avoiding risk factors, vaccinations, regular checkups, health education, and everything that contributes to promoting the health of the individual and the community, and reducing the spread of infections and chronic diseases.

C. Procedural: This refers to a set of planned and systematically implemented measures and procedures aimed at reducing the spread of diseases and minimizing the risk of infection or the development of complications. This includes activities such as promoting personal hygiene, vaccination, early detection, providing health guidance, and developing preventative health behaviors within the community.

5- The concept of health awareness:

A- First: This is the process of providing individuals and communities with the information and knowledge necessary to improve their health and promote awareness of the importance of adopting healthy behaviors. Health education aims to prevent and reduce the spread of diseases, and to empower individuals to make informed health decisions, thus contributing to the overall health of the community and improving quality of life.

B- In terminology: Some definitions of health awareness have emerged, including what the World Health Organization's expert committee described as convincing people and supporting practices that would lead them to a healthy life, using the health services available to them effectively and carefully, and making their own decisions, whether individually or collectively, in order to improve their health status. Health awareness is defined as: an important part of health care that takes care of improving successful health behavior and action that makes the information given easy to understand and use in daily life, which affects or modifies the health habits of the individual and society for the better, and that the Arab world needs to focus more on health awareness programs to achieve the desired goals through specific and clear plans that can raise the health level in society.

C. Procedural: Health education is the process of providing individuals and communities with information and knowledge that helps them understand public health issues and the factors that affect their health and well-being. Health education includes programs and activities aimed at promoting awareness of the importance of disease prevention, improving health behaviors, and

empowering individuals to make informed health decisions that contribute to improving their quality of life and overall health.

6- The concept of healthcare:

Primary care refers to services and procedures aimed at maintaining individual health, preventing disease, and treating illness. This care includes providing diagnosis, treatment, and preventative care to help improve quality of life and ensure the overall health of the community.

B- In technical terms: If care means preservation, attention, and proper management, then the term "health," as Al-Jurjani says, "is a state or quality by which actions proceed correctly." Some scholars define it as "a set of services and programs provided by the state to its citizens in the form of preventative and curative programs, through a network of medical and health institutions and facilities such as hospitals, clinics, medical laboratories, and pharmaceutical factories." Others define it as "the sum of services and procedures provided to members of society in general with the aim of raising their health level and preventing the occurrence and spread of diseases."

C. Procedural: Healthcare is a set of medical, psychological, and social services and procedures provided to maintain individual health, prevent disease, diagnose early, treat, and rehabilitate. Healthcare encompasses all activities aimed at promoting health, from preventive measures (such as vaccinations and regular checkups) to treatment (whether with medication or surgery), ongoing care, and follow-up.

7- The concept of a healthy diet:

A-Oli: This is a balanced eating pattern that provides the body with essential nutrients, such as proteins, carbohydrates, healthy fats, vitamins, and minerals, to support bodily functions and promote overall health. It includes consuming a variety of natural foods, such as vegetables, fruits, and whole grains, and limits processed foods, sugars, and saturated fats.

B- Conventional: This is a set of dietary habits adopted to achieve nutritional balance and provide the body with sufficient quantities of essential nutrients, such as vitamins, minerals, proteins, carbohydrates, and healthy fats. This system aims to promote overall health, support the immune system, improve energy and mental capacity, and prevent chronic diseases such as diabetes, heart disease, and obesity. It includes a variety of fruits, vegetables, whole grains, lean proteins, and healthy fats, while limiting the consumption of processed foods and added sugars.

C. Procedural: This is a set of daily food choices that meet an individual's nutritional needs, including a balance of essential elements such as proteins, carbohydrates, healthy fats, vitamins, and minerals, while avoiding harmful components like saturated fats, excess sugar, and high sodium. This system should help promote individual health, prevent chronic diseases, and achieve a healthy weight. It includes specific food portions according to recognized health standards, such as the World Health Organization's nutrition guidelines or local dietary guidelines.

8- The concept of health promotion:

A-Primary: It is the process of enabling individuals and communities to improve their health and control the factors that affect it, through health awareness, encouraging healthy behaviors, and creating supportive environments that contribute to improving quality of life and preventing diseases.

B- Terminologically: The meaning of health promotion extends to a wide range of political, regulatory, institutional, social, and environmental interventions aimed at empowering community members to better maintain health awareness... a guide for healthcare professionals on their health. Improving quality of life involves preventing the root causes of disease, not just focusing on prevention and treatment. Health promotion requires policymakers in all government departments to make health a central line of government policy. This means they must consider the health implications of all decisions they make and prioritize policies that protect people and reduce their incidence of disease. These policies must be supported by rules and regulations that govern the private sector to ensure alignment with the health and safety objectives of society. For example, this can be achieved by taxing unhealthy or harmful products such as alcohol, tobacco, and food products high in salt, sugar, and fat, while simultaneously promoting trade in other sectors. It can also be achieved through national legislation and plans that support the provision of clean water to villages and the completion of infrastructure, and by promoting healthy urbanization through the creation of healthy cities and the reduction of air pollution.

C. Operational: Health promotion is a set of activities and strategies aimed at improving public health and well-being by empowering individuals to take control of their health and make positive health decisions. This includes health education, providing information, and promoting healthy lifestyles, such as balanced nutrition and physical activity. It also involves creating supportive environments and developing public policies to promote health and reduce risks. The ultimate goal is to reduce the prevalence of disease and enhance quality of life.

Seventh: Previous studies

First study:

A study entitled "The Reality of Health in Primary Schools" prepared by students Rahma Kenoui and Hachemia Yahiaoui, a thesis submitted to obtain a Master's degree at Ahmed Draia University, Adrar, Faculty of Humanities and Social Sciences, 2020/2021

This study addressed the following question: What is the reality of health within primary schools? It employed a descriptive survey methodology on a population of 472 male and female students, using a questionnaire as the data collection tool. Among the most important findings was the significant importance of health, particularly in the current climate, and the need for all students to benefit from health services in order to achieve school health objectives.

Second study:

A study entitled "The Role of the School in Promoting Health Education among Primary School Students," prepared by student Rahma Bouzid, Master's thesis, Mohamed Boudiaf University, M'Sila, Faculty of Humanities and Social Sciences, Department of Sociology, 2015/2016

This study was based on the following problem: What is the role of the school in promoting health education among primary school students? This study used the descriptive method and the study sample consisted of 30 students who were tested using a simple random method via an interview form.

One of the most important findings of this study is:

-Raising awareness in the school about the importance of improving health standards in the school.

-The school must implement a continuous periodic program through which specialists in the health field are invited to give health awareness lectures to the students.

Third study:

The role of the detection and follow-up unit in health education within the school environment Biskra Municipality, 2024 This study aimed to identify the role and health education of screening and follow-up units in the school environment. It focused on eight screening units in the municipality of Biskra, relying on interviews and questionnaires as data collection tools. These were distributed to all unit members. The data were analyzed using statistical methods, including weighted averages and standard deviations. The study concluded with several key findings, including:

-The health education role of detection and follow-up units in the school environment is represented in the mechanisms used to spread education with a weighted average of 2.45 and a standard deviation of 0.696, and the areas of health education with a weighted average of 2.52 and a standard deviation of 0.523.

Fourth study:

A study entitled: The effectiveness of a health education program in changing risky behaviors and developing awareness among adolescents²⁰²⁵The study, conducted by Saliha Al-Qass, aimed to reveal the effectiveness of a health education program in changing risky behaviors and developing health awareness among third-year middle school students. The researcher developed a health education program in Arabic, comprising two units: "Your Health is in Your Food" and "Movement is a Blessing." The researcher relied on a set of tools, which are:

-Risk behavior scale developed by the researcher.

-The health awareness scale was prepared by the researcher.

-Health education program.

Then, using a quasi-experimental approach with experimental and control groups, the study arrived at a number of results, the most important of which are:

-There are statistically significant differences between the average ranks of scores of the experimental group members in the pre- and post-tests on the risk behaviors scale and the health awareness scale.

-There are no statistically significant differences between the mean ranks of the scores of the control group members in the pre- and post-tests on the risk behaviors scale and on the health awareness scale.

The study also concluded that it is necessary to reconsider the content of the intermediate education curricula in Algeria by including health education topics or creating special curricula for health education.

Fifth study:

Titled "The Algerian School and the Type of Health Risks"²⁰²⁵By Aisha Khamis and Nour El Houda Ramoun, this study aimed to identify the role of schools in spreading health awareness among their students and to determine the extent of the school's influence on acquiring and increasing health awareness. Primary school teachers in the Wilaya of Touggourt were selected

as the sample, and the study relied on a questionnaire. The study reached a number of conclusions, the most important of which are:

- 80% of the two schools do not have a clinic inside the school, and 70% of the two schools support their students in cleaning the classroom. The study also concluded that 86.7% adhered to preventive measures in light of the COVID-19 pandemic. The study found that 196.7% of the two schools observe the personal hygiene of their students. This study also showed that 50% of the two schools follow health programs in the media.

Eighth: School health fields

Table No. (01): Shows the three areas of school health

General trend	Rank	standard deviation	arithmetic mean	Very weak	weak	Medium	High	Very high	repetition %	health care (doctors)	magazines health school
High	2	759	3.72	-	2	12	20	5	repetition %	health care (doctors)	magazines health school
				-	5.1	30.8	51.3	12.8			
High	1	866	3.80	-	2	6	12	5	repetition %	Healthy environment (prevention teams)	magazines health school
				-	8.0	24.0	20.0	20.0			
weak	3	1,054	2.03	22	27	9	3	3	repetition %	Health education (Managers)	magazines health school
				34.3	42.2	14.1	4.7	4.7			

1- Healthcare: The table shows that the high-supervision category has a frequency of 3.7% and 3.8% of doctors, indicating a good focus on providing direct healthcare services by doctors. In contrast, the weak category has a frequency of 2%, which shows a lack of doctors to care for this category, which may negatively affect the quality of healthcare provided to it.

2- Healthy Environment: The highly supervised category shows a higher frequency in the healthy environment, as we find that the frequency of the prevention team is 30.5% in one classification and 8% in the other, reflecting a greater interest in providing a safe and healthy environment. In contrast, the vulnerable category recorded low percentages, reaching only 4.7% in one classification, which means that the efforts made to ensure a healthy environment for that category are less.

3- Health Education: Health education aims to promote health awareness among individuals, and it appears that the vulnerable group receives a higher percentage of health training at 42.1% and 4.7%, respectively.%

These high rates can be explained by an attempt to compensate for existing gaps in healthcare services and the health environment in the most vulnerable groups through increased awareness and training programs.

4- General level of supervision: The table shows that groups with high general supervision receive comprehensive care, a healthy environment, and appropriate health training, reflecting a good level of attention in those groups. In contrast, the vulnerable group has a decline in almost all indicators, which may indicate a need to strengthen its supervision to ensure an appropriate level of comprehensive care is provided.

In short, the table reflects an unbalanced distribution of health care, health environment, and health training between highly supervised and weaker groups.

Ninth: The level of healthcare in primary schools

Table No. (2): Shows the measurement of the level of health care in primary schools

Total grade	Rank	standard deviation	arithmetic mean	Degree					repetition	phrases
				Very weak	weak	Medium	High	Very high		
				1	2	3	4	5		
Very high	4	8.87	4.28	-	1	8	9	21	repetition	1- The school health doctor conducts comprehensive periodic medical examinations for all students, especially those in the final grades.
				-	2.6	20.5	23.1	53.8	%	
High	10	51.03	3.67	2	2	11	16	8	repetition	2- The school health doctor instructs the principal to follow up on the discovered illnesses with the parents.
				5.1	5.1	28.2	41.0	20.5	%	
High	5	1.82	4.10	-	1	8	16	14	repetition	3- The school health doctor learns about the students' previous health status by reviewing health records.
				-	2.6	20.5	41.0	35.9	%	
Very high	2	7.70	4.36	-	1	2	18	18	repetition	4- The school health physician takes all appropriate measures to combat infectious diseases and prevent their spread when the first case appears in the school
				-	2.6	5.1	46.2	46.2	%	
High	7	8.70	4.08	-	2	7	16	14	repetition	5- The school health physician refers discovered medical cases to specialized health centers and follows up on their treatment stages.
				-	5.1	17.9	41.0	35.9	%	
Very high	3	9.27	4.33	1	-	6	10	22	repetition	6- The school health doctor directs students who need vaccinations and missing doses
				2.6	-	15.4	25.6	56.4	%	
Very high	1	9.13	4.46	1	1	2	10	25	repetition	7- The school health doctor works to vaccinate students against communicable diseases according to the instructions of the Ministry of Health, such as polio, measles...
				2.6	2.6	5.1	25.6	64.1	%	
High	9	1,308	3.97	3	3	6	7	20	repetition	8- The school health doctor collaborates with the administration teams in meetings to discuss medical information with the school teacher on a regular basis to ensure that they are free from infectious diseases.
				7.7	7.7	15.4	17.9	51.3	%	
Very weak	19	9.66	1.59	26	6	4	3	-	repetition	9- The school health doctor is appointed from among the faculty members (teachers).
				66.7	15.4	10.3	7.7	-	%	
High	11	1,287	3.64	3	5	8	10	13	repetition	10- The school health doctor summons the parents of students who have been diagnosed with illnesses, discusses those cases, and directs them to work on treating and following up on them.
				7.7	12.5	20.5	25.6	33.3	%	
Weak	18	1,428	2.59	13	8	3	12	3	repetition	11- The school health doctor requests the principal to monitor the health of students with chronic diseases at least once every day.

				33.3	20.5	7.7	30.8	7.7	%	
Medium	16	1,436	3.13	7	7	8	8	9	repetition	12- The school health doctor gives special care to students with special needs with the aim of integrating them into the school community.
				17.9	17.9	20.5	20.5	23.1	%	
High	8	1,080	3.80	2	1	12	12	12	repetition	13- The school health doctor advises parents to follow up with their children and make them aware of everything related to health aspects (physical, psychological).
				5.1	2.6	30.8	30.8	30.8	%	
Medium	15	1,512	3.23	9	3	7	10	10	repetition	14- The school health doctor supervises the equipping of the first aid kit in the school with the principal.
				23.1	7.7	17.9	25.6	25.6	%	
High	12	1,231	3.44	3	6	10	11	9	repetition	15- The school health doctor treats and follows up with students who are suffering from malnutrition.
				7.7	15.4	25.6	28.2	23.1	%	
Medium	13	1,272	3.41	5	3	10	13	8	repetition	16- The school health doctor requests the principal to inform teachers, especially new ones, about sick students and their health status.
				12.8	7.7	25.6	33.3	20.5	%	
Medium	14	1,371	3.41	7	-	12	10	10	repetition	17- The psychiatrist performs periodic psychological assessments of the students.
				17.9	-	30.8	25.6	25.6	%	
High	6	1,210	4.10	2	3	5	8	21	repetition	18- The school health doctor prepares a monthly report on the health status of the students and their visits to schools and submits it to the health directorate for study.
				5.1	7.7	12.8	20.5	53.8	%	
Medium	17	1,428	2.74	12	4	10	8	5	repetition	19- The school health physician is concerned with the health care of the school staff and employees to enable them to perform their duties to the fullest extent.
				30.8	10.3	25.6	20.5	12.8	%	
High	-	7.59	3.72	-	2	12	20	5	repetition	health care
				-	5.1	30.8	51.3	12.8	%	

The table illustrates the levels of healthcare provided in primary schools. The assessments appear to be distributed across various criteria, including hygiene, health supervision, general healthcare, and health education. The table shows the following:

1- Indicators: This category includes various criteria, such as periodic inspection of the school environment, provision of first aid, provision of health awareness, and attention to the cleanliness of school facilities.

2-Score and levels of care: The score refers to the level of care assessed for each criterion. It is divided into five levels: "very high", "high", "medium", "poor" and "very poor". These levels help determine the quality of care provided for each indicator.

3- Central trend and standard deviation: The mean and standard deviation for each indicator's ratings are displayed, providing an overall idea of the quality of healthcare in each area. High average values indicate a good level of care, while low values may reflect lower levels of care.

4-Frequency and Percentages: The table also shows the number of schools that received each level of care, and the percentage for each level, illustrating the wide distribution of healthcare levels.

A general observation from the table reveals a disparity in healthcare standards. Some criteria were rated as "very high," indicating a strong commitment to public health in certain areas.

Conversely, other criteria received "very weak" ratings, suggesting a need to strengthen these aspects in schools to ensure the health and safety of students.

It can also be said that the table shows the distribution of responses regarding different levels of healthcare and the evaluation of specific aspects of public and environmental health. The table's content can be commented on as follows:

1- Nutrition and Environmental Health: In the fifteenth grade: This section addresses the impact of nutrition on the health of the school environment and its effect on students. It is evident that 23.1% of participants consider the impact of nutrition on environmental health to be high, and 28.2% consider it to be moderate, indicating an awareness of the importance of proper nutrition in improving environmental health.

2- School Health and Health Awareness: In the sixteenth grade: This section addresses the importance of health awareness for students regarding general hygiene and its impact on their health. We find that 33.3% of participants consider the level of awareness to be average, reflecting a need for more effective awareness programs in schools.

3- Training and Qualification of Healthcare Personnel: In the seventeenth grade: This section addresses the professional training of healthcare personnel in handling emergency situations. It shows that 30.8% of participants consider the level of training to be average, highlighting the importance of raising the level of professional qualification to reduce errors and increase efficiency.

4- Public Health System and Health Service Evaluation: In the 18th grade: This refers to opinions about the efficiency of the health system and its responsiveness to patients' needs. 53.8% of participants consider the overall efficiency of the system to be good, while 20.5% consider it to be average, indicating a divergence of opinions regarding the effectiveness of the health system.

5- Health Control: In the nineteenth grade: This refers to the extent of oversight regarding the application of health and safety standards in public places. 30.8% of participants consider the level of oversight to be average, while 25.6% consider it to be high, reflecting a desire to strengthen oversight and improve adherence to health standards.

The need for improvements in environmental healthcare, health education, and vocational training is highlighted. The report also points to the necessity of raising the level of health oversight to ensure better implementation of public health and safety standards.

Tenth: Healthcare according to health councils

Table No. (3): Shows healthcare according to Membership Health councils.

Health Council	repetitions	average Calculation	Healthcare level	standard deviation	standard error of the mean
Care member	71	4.06	High	659	160
Not a healthy organ	22	3.45	High	739	158

The table presents the level of healthcare provided by health council membership. It includes the frequency of responses, the arithmetic mean, the level of healthcare provided, and the standard deviation for health council members compared to non-members.

Key observations include:

1-Repetitions: There are 71 members on the Health Council, compared to 22 people who are not members.

2- Arithmetic Mean: The arithmetic mean for the health care score is higher for members (4.06) compared to non-members (3.45), indicating that members of the council have a better health care score.

3- Level of healthcare: Both groups show a high level of healthcare, but the members' level is better.

4-Standard Deviation: The standard deviation for members (0.659) is lower than for non-members (0.739), which means that members have more consistency in the level of healthcare.

Conclusion: Members of the Health Council demonstrate a higher level of healthcare and greater consistency in healthcare assessment compared to non-members, which may indicate the effectiveness of council membership in improving the level of healthcare.

Table No. (4): Shows the differences in the level of health care according to the health councils variable.

Care Health	a testLevens due to differences in standard deviations		Test-t: Test for statistical significance of means						
		Level of significance		degree Freedom	level Significance	difference Averages	Differences of Deviation Standard	Areas of trust within limits 95%	
	F		T					minimum	Limittop
	2,159	1.50	2,654	37	0.12	6,0428	2,2770	1,4292	1,06563

The table presents the results of the test for differences in healthcare levels according to the health council variable. Let's analyze the table in detail:

a test1: Levene

This test was used to check if the variances were equal between the groups. The result is shown here.(p = 0.150) and the significance level (F = 2.159)

It is greater than 0.05. This indicates that the hypothesis of equal variances is not rejected, and therefore, the variances can be considered equal between groups.

For differences in averages:T-test

The T-value of the t2.654 test is

-Degrees of freedom: The test has 37 degrees of freedom, which reflects the sample size used.

It is less than (p = 0.012) Significance level: 0.05

-This indicates that there are statistically significant differences in the averages between the groups, and therefore it can be said that there is a considerable difference in the level of health care according to the health councils.

-Mean differences and standard deviation. Mean difference: The mean difference is 0.60428, which expresses the difference between the average healthcare outcomes between the groups.

-Standard deviation difference: The standard deviation of the difference is 0.22770, which is a measure of the variance or dispersion in the differences between the means.

Areas of trust at the limits5:9%

-The minimum limit: 0.14292, which means that the actual difference in averages may be greater than this limit.

-The maximum limit: 1.06563, which indicates that the actual difference in averages may be less than this limit.

-In general, the table shows statistically significant differences in the level of care.95% of health information is based on health councils, with variations within confidence limits.

Table No. (5): Shows the presence of health education topics in the elementary science education book

Percentage	Health education topics	Number of topics	Books
3%	02	90	First year
3.7%	02	54	Second year
17.39%	12	23	Third year
20%	05	25	Fourth year
22.64%	12	53	Fifth year
14.4	44	311	the total

The table shows the distribution of health education topics in the elementary science textbook by grade level. The following can be observed:

1-First year: Only two out of 90 topics in the book are covered, representing 3%. This shows that the focus on health education in this year is very low.

2-Second year: Two health education topics were allocated out of a total of 54 topics, representing 3.7%. This percentage remains low, indicating a lack of attention to health education compared to other topics.

3-Third Year: There are 12 health education topics out of 23 topics in the book, representing 17.39%. Here there is a clear improvement in the attention given to health education, as the percentage is higher compared to the previous two years.

4-Fourth year: 5 out of 25 topics were allocated to health education, representing 20%. This percentage is considered high, which means that health education took up a larger space in this year.

5- Fifth Year: Contains 12 out of 53 topics dedicated to health education, representing 22.64%. This indicates that health education received significant attention in this year as well. Total: Out of a total of 311 topics across the different years, health education comprised 44 topics, or 14.4% of the total topics.

The table shows that the percentage of health education increases gradually from the first year to the fifth year, indicating an increasing interest in it as students progress through their school years.

Table Number (6): Determining the type of vaccines for each level according to the educational stages.

The specified level of vaccination	Type of vaccines
First grade elementary	Vaccination against diphtheria, tetanus, polio, and measles
First year of middle school	Diphtheria and tetanus vaccination for adults. Polio.
First year of secondary school	Diphtheria and tetanus vaccination for adults. Polio.

The table shows the types of vaccines given to school students at different educational levels, with the aim of promoting health protection against certain infectious diseases. The table includes the following:

1- First year of primary school: Students are given vaccines against diphtheria, tetanus, polio, and measles. These vaccines are essential for young children to protect against some common diseases that can have serious health consequences.

2- First year of middle school: Students are revaccinated against diphtheria, tetanus, and polio (adult dose). This additional vaccination helps boost students' immunity as they get older.

3- First year of secondary school: Students are re-vaccinated against diphtheria, tetanus, and polio (the adult dose). The aim of this re-vaccination is to maintain a good level of immunity during adolescence. The aforementioned source is the National Forum for Evaluating the National School Health Program, which emphasizes the importance of school health in providing a safe and healthy environment for students and ensuring their continued education in good health conditions.

Table Number (7): Arithmetic means and standard deviations of the study sample members' ratings for items in the field of health education and promotion.

Level	deviation Standard	average Calculation	Paragraph	Number
High	0.70	4.26	Student representatives from each class participate in health committees.	1
High	0.83	4.14	Evacuation drills are conducted annually in cooperation with the Civil Defense.	2
High	0.72	4.04	Programs are offered to raise awareness of security and safety among students at the school.	3
High	0.72	4.03	Programs are offered to raise nutritional awareness among students at the school.	4
High	0.77	4.00	School competitions are organized for the cleanest class and student.	5
High	0.79	3.88	Programs are offered to raise students' sports awareness at the school.	6
High	0.87	3.84	First aid awareness programs are organized in schools.	7
Medium	0.96	3.54	Health awareness courses are held for teachers.	8
Medium	0.98	3.52	Educational health seminars are offered to the parents of students at the school.	9
Medium	0.96	3.50	Programs are organized to raise awareness of reproductive health among students at the school.	10
High	0.56	3.88	Total grade	

This table presents the means and standard deviations of the study sample in the area of health education and promotion. The table indicates assessments related to student participation and the performance of educational programs in various health fields.

- High values (numbers) represent favorable positive ratings, reflecting the importance of educational programs and activities in promoting health awareness among students.

Standard deviations illustrate the degree of variation in assessments, with lower values indicating greater agreement among opinions, while higher values may reflect variations in experiences or observations among participants.

- Note: Most items received a "high" rating, indicating a high appreciation by the sample of the importance of those items in the field of cleaning and health promotion. The overall arithmetic mean for all items was about 3.88, which is considered high, indicating a relatively high consensus among the sample on the importance of these procedures. The overall standard deviation was 0.56, which is relatively low, reflecting a high degree of agreement among the sample members in their evaluation.

-Conclusion: In general, the table shows that the sample members consider the items related to cleaning and health promotion to be of great importance, with a relative consensus of opinions about them.

Table No. (8): The weighted scale for determining the degree of appreciation of the study sample members for the reality of school health.

the condition	weighted arithmetic mean
Low	Less than 2.34
Medium	From 2.34 - less than 3.67
High	From 3.67 and above

This table presents a weighted scale that determines the degree to which the study participants perceive the reality of school health. The results are classified into three different categories based on the weighted arithmetic mean, as follows:

1- *Low condition*: If the weighted arithmetic mean is less than 2.34, then the level of appreciation of the study sample regarding the reality of school health is considered low.

2- *Moderate condition*: If the weighted arithmetic mean is between 2.34 and 3.67 (less than 3.67), then the level of assessment is classified as average.

3- *High condition*: If the weighted arithmetic mean is 3.67 or higher, the rating level is considered high.

The table helps in analyzing the level of satisfaction or appreciation of the individuals participating in the study towards the reality of school health and divides it into levels to facilitate understanding and interpretation of the results.

Table Number (9): Arithmetic means and standard deviations of estimates for school health status journals in Hebron Governorate government schools.

Degree	standard deviation	weighted arithmetic mean	Field
High	0.44	4.42	Health services
High	0.56	3.95	School nutrition
High	0.56	3.88	Health education and promotion
High	0.67	3.86	school environment
High	0.45	4.03	Total grade

This table presents the arithmetic means and standard deviations of the study sample's assessments of school health in Karak Governorate's public schools. The table measures four areas related to school health, indicating the highest score in each area, along with the arithmetic mean and standard deviation for each.

1- *Health services*: It obtained the highest arithmetic mean (4.42) with a low standard deviation (0.44), indicating that the majority of participants believe that health services are well available.

2- *School nutrition*: I obtained an arithmetic mean of (3.95) and a standard deviation of (0.56), which indicates a relative satisfaction with school nutrition.

3- *Health education and promotion*: The arithmetic mean (3.88) came with a standard deviation (0.56), which shows an acceptable assessment of this field, with a relative variation among the opinions of the sample.

4- *The school environment*: It obtained the lowest arithmetic mean (3.86) and standard deviation (0.67), reflecting a divergence in the sample's opinions about the quality of the school environment.

5- *Total score*:The overall arithmetic mean is (4.03) with a standard deviation of (0.45), indicating a generally high level in the assessment of school health.

General conclusion: The results in the table indicate a good level of satisfaction with school health in the Karak Governorate government schools, with slight variations between areas, where health services came in the highest rank in terms of evaluation, while the school environment came in the lowest rank.

Table Number (10): Arithmetic means and standard deviations around school health axes in light of global trends.

level	standard deviation	arithmetic mean	Axes
low	0.2775	1.41	School Health Department
low	0.3403	1.31	Health Advisor Training
low	0.3234	1.45	Activating the components of school health

The table presented displays statistical data on the research sample's opinions regarding school health themes, calculating the means and standard deviations of the availability level of these themes. The results are categorized according to the availability level (high or low). The table contains three main themes related to school health: school health management, ensuring access to health guidance, and activating the components of school health services.

1- *Arithmetic mean*:The arithmetic mean for each axis represents the level of availability of these elements in the study sample. The values range between [values range] and [values range], indicating that the overall level of availability for these axes is low.

2- *Standard Deviation*: This reflects the dispersion of the data around the mean, where we note that the values range between and, this indicates a slight variation in the opinions of the sample regarding the level of availability of these axes.

Level 3:Based on the arithmetic mean, the availability level for each axis was rated as "low," meaning that school health, the provision of health mentors, and the activation of health components were not adequately implemented according to the opinions of the sample.

The table indicates a lack of availability of school health-related components in the institutions included in the study, which may indicate a need to strengthen school health management and provide the necessary resources to activate it better.

Section Two: Health Culture

First: Objectives of Health Education

The primary goal of the health education process is to achieve happiness and well-being for members of society by raising their health standards, correcting their behaviors, and striving to rectify their wrong attitudes and unhealthy habits, while working to develop their health awareness and knowledge through the conditions of physical, mental and psychological safety and sufficiency. To reach this goal, the following primary objectives must be achieved:

Maintaining and enjoying good health is a goal and objective that all individuals strive for. The community needs to reach it, and make raising the health level a basic requirement, through everyone's keenness to make efforts to develop their organizational cultural aspect and benefit from the experiences of others, especially those educated in the health field.

- Encouraging and involving community members in the development and improvement of health services, through positive contributions to activating the role of health institutions and improving and developing their performance.
- Working to change unhealthy behaviors and habits into healthy behaviors and developing them.
- Defining the effective roles played by primary and supporting health institutions in providing health services such as delivering necessary vaccinations to prevent diseases. (Ben Abbo Rania, 2019-2020, p. 50)

Second: The importance of health education

The importance of health culture lies in a number of elements, including the following:

- Enabling individuals to enjoy a correct scientific view that helps them interpret health phenomena and makes them able to search for the causes of diseases and their effects in a way that enables them to avoid and prevent them.
- It is a knowledge base that a person can benefit from by using it when needed to make sound health decisions regarding the health problems he faces.
- Creating a spirit of pride, appreciation, and confidence in science as a means of doing good through scientists specializing in health.
- It generates in the individual a desire to learn and instills in him a love for discovering more of it, as it is a dynamic activity characterized by rapid development. (Buthaina Barouq, 2021-2022, p. 55)

Third: Means of achieving health awareness

These are the means used to deliver information and experiences to all people. Health education and guidance require competent individuals with skills and knowledge of the fundamentals of health education, who are capable of expressing and clarifying, and of developing appropriate solutions to the problems presented to them. It also requires providing the means and methods that the health educator can use to deliver the health education message, which is:

- A- Direct contact: which depends on the health educator's personality, methods, skills and training, and is usually in the form of a confrontation or meeting between the educator and those to whom he provides health awareness, whether it is an individual or group confrontation.
- B- Indirect communication: This is the process of health educators communicating indirectly, such as using various media such as satellite channels, television, radio, posters, pictures, and exhibitions, to convey the health education message to the community. (Ben Abbo Rania, 2019-2020, p. 52)

Fourth: Areas of health culture

In order to achieve the goals of health education, and to create awareness and understanding among citizens of their responsibilities, and in order to contribute effectively to the process of improving and providing positive health conditions, work should be done in all the different areas surrounding the human being and in all the roles and stages of his development, and the various aspects of his life, culture, social and professional personality.

Among the most important of these areas are:

A- The home: where health education works to:

- Increased attention to personal health and general hygiene, healthy nutrition and water cleanliness, quality of clothing, hours of rest and play, and sleep and wakefulness.

Family members are encouraged to adopt healthy habits and not to practice unhealthy habits such as drinking from the same cup or using a shared towel.

- Family members practice basic disease prevention and rapid treatment of the infected.

- Paying attention to environmental health (insect control, using proper methods for food preservation, healthy ventilation).

b) School:

The school plays a key role in a child's life, changing their attitudes and behaviors, and instilling sound and desirable principles and habits. Scientific and educational institutions at various levels, from kindergarten to school to universities, can support and assist health institutions in reaching their goals and achieving success in all their fields. The school's role in the health education process lies in the following:

- The school cooperates with students' parents to transfer culture and awareness to the home.

- The school cooperated with the health institution to hold health seminars, form special committees for health education, and work to organize exhibitions with the latest educational and illustrative tools related to health culture.

- Students should convey sound health guidelines to their homes through leaflets.

Healthy.

- Increased interest in physical education and sports.

- Involving teachers in epidemic and disease control campaigns based on their cultural background

Their health and their use of modern educational methods.

- Teaching students how to deal with accidents and medical emergencies and the principles of first aid, so that they can apply them practically and transfer them back to the home and community.

C- Society:

Advanced societies provide numerous opportunities for health education, including advice and guidance offered by community health service providers and health programs for implementation in various community settings such as cafes, clubs, restaurants, mosques, and camps. (Ahmed Mohamed et al., n.d., p. 21)

Third topic: The nature of school health

First: School Health Objectives

- Protecting the school environment from diseases and treating minor diseases that are discovered.

-Monitoring the conditions of prevention, hygiene and security in the school.

- Participating in multiple national campaigns to combat social ills.

- Developing awareness among pupils and school staff on how to deal with life problems in the school and local environment.
- To provide school staff with the skills and experiences that help them develop their knowledge, attitudes, and healthy behavior, and to translate learned health facts into healthy behavioral patterns.
- The ability of members of the school environment to help themselves to prevent diseases and promote health.
- Diversifying and focusing activities inside and outside the departments, such as doctors' visits to the school, school radio broadcasts, wall displays, and field trips, encourages students to be creative and fosters a spirit of competition and scientific initiative among them. (Abano Saham, 2015-2016, p. 26)

Second: The importance of school health

Those concerned with education emphasize the importance of healthcare for the growth of society by providing appropriate school health services for students through various programs such as: screening new students, providing vaccinations against infectious diseases, and monitoring the safety of the school environment. Health units provide first aid to students and refer those in urgent need to health centers. Teachers play a crucial role in observing sick students, especially during morning assembly or class, and referring them to the nearest health center or hospital depending on the emergency. One of the teacher's fundamental duties is to educate students about types of infectious diseases, how to choose appropriate healthy food, teach them first aid skills, and emphasize the importance of school health in protecting them from burns, fractures, and infectious diseases, instilling these values in their daily practices. (Mashghal Bin Abdul Rahman Al-Salmi, Muhammad Jad Hussein, 2021, p. 20)

Third: School health resources

School health is achieved through a range of means, including:

- The Prevention From The Danger The health thatd He is exposed She has the following Miz In the school S And other than thatk She is the Disease Infectious diseases, accidents, and serious injuries.
- Published The Awareness healthy Between The following Miz
- Providing The environment Siya Health
- Interest By nutrition Health for the family My D.
- The Care The medical: Come on, the total Boldness And the fah Recommendations The medical The Share religion The following Miz Aboutd The Entry To the school SL Visit doctor Public health ة or doctor The Sinan And the eyethong And humiliationk With reassurance On health The following Since Waqqa It From The Disease And uncle L Ali Treating it.
- link Connection Cooperation And general Land Trust Between The school S And thenavel And the devicemical The This He strives To protect the hills Miz From The Disease and Follow her and Treating it.

Health also ensures the provision of a set of preventive measures, including general and specific preventive measures, as well as secondary preventive measures aimed at early detection, immediate treatment of the disease, and preventing its spread, such as examinations. medical And puppies Analyses of his merit and Good The Boldness Third-degree prevention aims to reduce disease complications, rehabilitate patients, and treat illnesses. (Rahma Kanawi, Hashmiya Yahyaoui, 2020-2021, p. 15)

Fourth: Areas of school health

For Health The school Group From God Complete And it has It was represented In Fields The Next:

1- Health services sector: Progress The Health The school The Aay The Baya For Students and Availability Treatment Required per condition sick, as It works on discovery any illness or epidemic He appears between The pupils, And it works on isolation Cases The injured person is treated or transferred to the hospital, and school health services also provide the necessary medicines and equipment for emergency cases.

2- Field Service The Environment The school:

- Paying attention to the maintenance and cleanliness of the school building and study areas.
- Maintaining, painting, and renewing school furniture whenever possible.
- Continuous maintenance of the restrooms and their taps from which the students drink.
- Providing appropriate food for students in the restaurant, and paying attention to the general cleanliness of everything that is offered to students.
- Working to protect the school environment from pollution.

3- The field of health education: Where You get up By raising awareness The Students In different types The Materials Food Aya Its benefits and diseases of malnutrition, spreading health awareness about types of food and healthy ways to eat them, and avoiding diseases resulting from unhealthy nutrition or diseases transmitted through contaminated food. (Fadila Sadrati, 2013-2014, p. 134)

Conclusion:

In conclusion, school health plays a pivotal role in promoting a health-conscious culture among students in Algeria, as schools are a suitable learning environment for instilling healthy behaviors in younger generations. By providing health awareness programs and primary healthcare within schools, students can acquire knowledge and skills that help them adopt healthy lifestyles, thus contributing to improved public health levels in society. Furthermore, collaboration between educational and health institutions enhances the efficiency of health services provided to students and ensures the sustainability of these efforts. With continued attention to school health and the development of health programs, Algeria can cultivate a generation aware of the importance of health and capable of contributing effectively to building a healthy society and a prosperous future.

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