

**Al-Quds University**  
**Deanship of Graduate Studies**  
**School of Public Health**



**The Role of Schools in Promoting Public Health Practices  
in Governmental Schools- Gaza Strip.**

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**The Role of Schools in Promoting Public Health Practices  
in Governmental Schools- Gaza Strip.**

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**Al-Quds University**  
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**Thesis Approval**

**The Role of Schools in Promoting Public Health Practices in  
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## **Dedication**

I dedicate my thesis work to my family; my parents "My father and mother" who give me unlimited love and support, to my wife who shared with me happiness and hard times.

Thanks also extend to my brothers and sisters, to all my friends, and my beloved ones with whom I was spend the lovely times and learn a lot.

In addition, I dedicate this work to my valuable and precious country "Palestine" as a small contribution to the sea of sacrifices exerted to gain its liberation.

The researcher

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**Declaration:**

I certify this thesis submitted for the degree of Master is the result of my own work, and this study (or any part of the same) had not been submit for higher degree at any university or institution.

Signed:

.....

Abdallah Nasser Mohammed Nassar

.../...../2017

## **Acknowledgement:**

Firstly and finally holy thanks to Allah who inspired me with the needed patience and power to accomplish this work.

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The researcher

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## **Abstract:**

*Our children's is our future, for this reason Schools and parents should be cooperate to promote public health practices for students; promoting public health practices affect student's health, and then Affect the academic achievement of the students.*

*This study aimed to determine the role of schools in promoting public health practices in governmental schools-Gaza strip. Moreover, the study aimed to determine the role of schools in prompting public health practices in four axes, environment, hygiene, nutrition, and health education. In addition to, this study aimed to determine whether there were differences in promoting public health practices according to demographic variables: (gender- receive specific training- age - years of experience -the directorate). Moreover, to appraise the student's and caregivers (mainly mothers) perspective regarding the role of schools in promoting public health practices, and to develop recommendations that might help in promoting public health practices.*

*This cross-sectional study method was used a methodological triangulation provided a combination between quantitative (self- administrated questionnaire) and qualitative paradigms (focus groups discussion with students and other focus group with caregivers). The study sample was 170-school health coordinator, from governmental schools, located in Gaza Governorates in North Gaza, Gaza, Middle area, Khanyounes, and Rafah. Data shows the roles of schools in promoting public health practices.*

*Most of study sample was agree that, there is a role for schools in promoting public health practices in the four school health axes. The relative weight of the total axes was 78.90%, and the mean equal 3.94. While the sub-areas was axis, (Nutrition) occupied the first rank with a relative weight reached 81.36%, and the mean equal 4.07. The axis (Hygiene) occupied the second rank with relative weight 79.54%, and the mean equal 3.98. The axis (Health Education) occupied the third rank with relative weight 77.87%, and the mean equal 3.89. The axis (Environment) occupied the last rank with relative weight 77.37%, and the mean equal 3.87. A statistically significance relationship was found between the role of schools in promoting public health practices and gender; there are significant differences in favor of females schools. Moreover the results demonstrated that there is a statistically significance relationship was found between the role of schools in promoting public health practices and the directorate of education; there are significant differences in favor of directorate of education in Gaza.*

*Focus groups, which conducted with students and caregivers results shows that, schools play an important role in promoting public health practices. However, there is a need for more attention in school hygiene, and there is need for food program in schools.*

*Study findings highlight the need for regular follow up for personnel and public hygiene from both school and caregivers, and the study recommended that Schools need more health education meetings for students and caregivers. In addition, Schools should offer the needs of hygiene tools, especially soaps, trash baskets, brooms, scrapers, clipping nails.*

*Moreover, Ministry of Education and Higher Education should be more attention in training school health coordinators, prepare public health practices manual as a guide for schools, Health facilities and bathrooms need regular maintenance, environmental clubs in schools should be more activation.*

*Students need to learn about the seriousness of obesity on human life, the importance of drinking water constantly, and road safety. Finally, School management and school health committee should guides the students and staff to websites related to health and participate of students in campaigns planting seeding inside school.*

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## **List of Abbreviations**

<b>CDC</b>	Centers for Disease Control
<b>GoS</b>	Governmental School
<b>GS</b>	Gaza Strip
<b>LCD</b>	Liquid-crystal display
<b>MEHE</b>	Ministry of Education and Higher Education
<b>MOH</b>	Ministry of Health
<b>PCBS</b>	Palestinian Central Bureau of Statistics
<b>SH</b>	School Health
<b>SHC</b>	School Health Coordinator
<b>SHP</b>	School Health Program
<b>SM</b>	School Management
<b>SPSS</b>	Statistical Package of Social Science
<b>UNICEF</b>	United Nations International Emergency Children's Fund
	United Nations Relief and Works Agency for Palestine
<b>UNRWA</b>	Refugees in the Near East
<b>WHO</b>	World Health Organization

# Chapter One

## I. Introduction

### 1.1 Background

In the past few decades, many countries have succeeded in reducing some of the gravest threats to the youngest children's health. Overall, children now live longer and better nourished, have more up-to-date immunizations and are healthier than in the past. As a result, about 2.5 million fewer children die annually now than in 1990. As more and more children survive to school age, countries all over the world are seeing an increase in the number of children who attend school. In too many cases, however, ill health still prevents children from acquiring new knowledge and skills and from growing into productive, capable citizens who can help their communities grow and prosper. To achieve their potential, schoolchildren must participate fully in educational activities. To do this, they must be healthy, attentive and emotionally secure. (World Health Organization WHO, 2005).

Health is one of the basic demand of society, and in the Gaza Strip (GS), in particular, there is many factors affect public heath, so individual health and society should be on the top of priorities of community institutions specially Ministry of Health (MOH), and Ministry of Education and Higher Education (MEHE).

Both education and health are related to each other's; schools have the potential to be the crucial part of the system to provide basic health needs. Which students are spend a significant period and schools can reach entire families. However, the school is only part of the broader community system; the responsibility not fall only on the schools. School health program (SHP) blends a comprehensive primary medical care, with preventive and psychosocial services, and organizes broader school-based and community-based health promotion efforts. In Palestine, SHP offers the services through the governmental school (GoS) health program and refugee students receive services through United Nations Relief and Work Agency for the Palestinian Refugees in the Near East ( UNRWA).

School health program is including all the strategies, activities, and services offered by, or in association with schools that are designed to promote students' physical, emotional, and

social development make up a school's health program. When a school works with students, their families, and their community to provide these strategies, activities, and services in a coordinated, planned way, then the term coordinated SHP applies. (American School Health Association, 2009).

Health promotion is the science and art of helping people change their lifestyle to move toward a state of optimal health. Optimal health defined as a balance of physical, emotional, social, spiritual, and intellectual health. Lifestyle change can be facilitated through a combination of efforts to enhance awareness, change behavior and create environments that support good health practices. Of the three, supportive environments will probably have the greatest impact in producing lasting change". (Donnell, 2009)

In Palestine, morbidity among governmental school students was 17.96% in the first grade pupils (20.3% in West Bank and 11.9% in GS while morbidity in GS was 17.5% among pupils in the 7th grade compared with 18.3% among pupils in the 10th grade. (MOH, 2005)

The researcher conducted this study to determine the role of schools in promoting public health practices in governmental schools -Gaza strip, in order to promote students health and learning process that is important for community health.

## **1.2 Research Problem**

School health (SH) should be on the list of national priorities; because of a healthy school is an investment for the future, and the SHP is an effective tool to improve communities, personal health and environmental awareness programs to students health as important category of community.

Schools should be considered as a basis for societal change and sustainable development, with more focus on preventive aspects. Schoolchildren and teachers can act as messengers for other out-of-school children and members of their communities to communicate better practices in hygiene and overall health. It is also very necessary to coordinate with parents and community members, to encourage their investment in school health programs. School health-based life skills are essential to develop students' behaviors during and after school hours. The involvement of public and private sectors in design and support of school health

programs, as well as their participation in monitoring and evaluation, will communicate better health practices in hygiene and overall health.(MEHE, 2016)

It is apparent for the researcher who work as a school health supervisor in MEHE that some infectious disease and health problems spread among students in the GoS. These problems are such as anemia, fatness, unsuitable school canteens and some dangerous behaviors, which produce negative, affected on student's health. Some of these behaviors are spending on a long time in front of space screens, internet, and using laptop. Moreover, mental disorders and anxiety which come from the effect of exams. Group of students having some medication without medical prescription. In addition, the bleeding accidents in Gaza streets, un knowing of the way of driving motorcycles, full classes, un suitable school desks, lighting, ignorance of using war remains, further more unsuitable device for the students with disabilities.

In addition, malnutrition is associated with emotional concerns and social problems such as mental retardation, aggressive behavior and decrease in intelligence and has a relationship with chronic diseases. Breakfast is an important meal, which helps assimilation in school and increases performance. (Al-Demah M. , 2012). Health education programs can prevent these problems.

These facts are clearer with help of school visits by the researcher and making interviews with managers and school health coordinators (SHC). The researcher want to explain the role of school in promoting public health practices, this role can facilitate SH work and achieving its goals.

Moreover, this study benefit the researchers by increase their knowledge by use the study as a reference and the findings may encourage them build on it another studies.

Therefore, it requires attention and many programs that promote students health through a systematic and comprehensive program of SH.

Schools have an important preventive and therapeutic role on SH, by consolidating an integrated set of concepts, principles, systems, and services, which aims to promote SH status which reflect on community health.

### **1.3 Justification**

There is a very close and reciprocal relationship between general health and education. In fact it has been demonstrated that students' health has a significant impact on students' concentration and their participation in classroom and other school activities resulting in positive changes regarding their skills and academic achievement. Nutrition Researches have shown that poor health status is a major reason for truancy, dropout rates and poor performance at school. On the other hand, school-based health education has successfully helped students gain skills related to their physical, psychological and social safety. Upon this perception, the MEHE adopted many comprehensive health programs to improve the students' health mentally, physically psychologically, socially and environmentally. The Ministry is working hard, in collaboration with local and international partners, to guarantee that school environment is safe and corroborative for teaching and learning process. Such programs are conducted with active participation of students, school staff and local community to ensure a positive change on the students' and school health in general. (MEHE, 2016).

In Gaza Strip, there is 523880 students distributed as 243838 students in governmental schools, 261657 students in UNRWA schools, 18385 students in private schools. These numbers of students need more and more attention especially in SHP.

The current political and economic situations have affected the overall aspects of life in Palestine, including health status. Such situations require urgent plans to respond to the challenges and ensure a healthy life for both students and teachers alike. These comprehensive health programs are basically done through active participation of school students, teachers, administrative staff, and the local community, in addition to NGOs and civil society organizations, to ensure that health programs and schools activities reflect the real needs. (MEHE, 2016)

An effective school health programme can be one of the most cost effective investments a nation can make to simultaneously improve education and health. Promoting school health programs as a strategic means to prevent important health risks among youth and to engage the education sector in efforts to change the educational, social, economic and political conditions that affect risk.

Because of some of today's and tomorrow's, leading causes of death, disease and disability: (cardiovascular disease, cancer, chronic lung diseases, depression, violence, substance abuse, injuries, nutritional deficiencies, and helminthes infections). Can be significantly reduced by preventing some interrelated categories of behavior that are initiated during youth and fostered by social and political policies and conditions: which is (Tobacco use, behavior that results in injury and violence, dietary and hygienic practices that cause disease, sedentary lifestyle, and sexual behavior that cause diseases).

Schools are recognized worldwide as settings for health promotion, and there is increased attention on school as a health promoting setting (Sansolios & Egberg, 2011). In school it is possible to reach a large population over several years, and it is during the first years of life that most future health-related lifestyles, behaviors, habits and attitudes are formed ( Commission on Social Determinants of Health CSDH, 2008). Outside of the home and family context, children and young people spend most of their time at school, which has an influence on their health and well-being in general (James, 2010).

Also Group one of strong foundations for successful schools is food, health, social, physical security and environment. ( Nelly, 2008).

SH is considered one of the means of development in the community, and in particular, it is target on students who represent a broad category of society, the basis for the future which is required for each state. So theses attention not only produce benefit for students, but also extends to families and society as a whole, so international covenants focused on provide their needs, and health care for them after early screening for their health through regular screening tests. These regular examinations aimed to check student's health status, educating and instructing their family, and guiding through health methods to diseases prevention, as well as health education for students and parents.

Therefore, the researcher aimed to determine the role of school in promoting public health practices, to decrease school health problems that affect students and community health.

#### **1.4 General Objective**

The overall objective of this study is to determine the role of schools in promoting public health practices in governmental schools- Gaza Strip.

## **1.5 Specific objectives**

1. To identify the role of schools in promoting public health practices for students.
2. To determine whether there were differences in promoting public health practices according to the following variables: (gender- receive specific training- age - years of experience -the directorate).
3. To appraise the student's and caregivers (mainly mothers) perspective regarding the role of schools in promoting public health practices.
4. To develop recommendations that might help in promoting public health practices.

## **1.6 Research Questions**

### **1.6.1 Main Question**

What is the role of schools in promoting public health practices in Governmental Schools - Gaza Strip?

### **1.6.2 Specific Questions**

1. Is there any role of schools in promoting environmental health practices for students?
2. What is the role of schools in promoting hygiene practices for students?
3. What is the role of schools in promoting nutrition health practices for students?
4. What is the role of schools in promoting health education?
5. Are there differences in promoting public health practices according to the following variables :( gender- receive specific training- age - years of experience- the directorate)?
6. What is the perspective of student's and caregivers (mainly mothers) regarding the role of schools in promoting public health practices?
7. Which suggestions could be recommended to promoting public health practices?

## **1.7 Context of the study**

### **1.7.1 Demographic Context**

The estimated population of Palestinian in the state of Palestine at the end of 2015 was 4.75 million: 2.90 million in the West bank (61.0%), and 1.85 million (39.0%) in GS. the highest population was in Hebron with (15.1%) of the total population, followed by Gaza governorate with (13.4%) according to Palestinian central Bureau of Statistics (PCBS, 2015).

GS divided into five governorates: North Gaza, Gaza City, Mid Zone, Khanyounes and Rafah (PCBS, 2004). PCBS also indicate that the Palestinian society can be defined as a young one, where persons aged less than 15 years constituted(39.4%) of the total population at the end of 2015 of which(37.0%) in the West bank and(42.8%) in GS.

The Palestinian population in the region under study characterized by a very rapid growth rate (one of the highest in the world) and the predominance of youth in the population. The majority of Palestinians (3.7 million children and young people) are under the age of 25, and nearly 40 per cent of them (2.5 million) are under 18. The median age estimated at around 16. (UNICEF, 2010).

In Palestine there is 10-year basic education cycle which is compulsory and free of charge in government and UNRWA schools. UNRWA schools cover only nine grades, so students from these schools transfer to government or private schools to complete their education. Students who successfully complete the 10-year basic education cycle are promoted to a 2-year secondary cycle. There are two types of secondary schools: academic and vocational. Each is two years in duration. The academic secondary school program is divided into two streams: scientific and literary. The vocational secondary school program is divided into four streams: commerce, industrial, agriculture, and nursing. At the end of this cycle, students take the General Secondary School Examination (Tawjihi). Their performance on this examination affects their likelihood of being admitted to a college or university in these Palestinian territories or elsewhere in the Arab world. (MEHE, 2016)

In 2015/2016, there were 704 schools in GS: 395 GoS, 257 belong to the UNRWA and 52 private schools. The number of students was about 502703 thousand (251693 thousand males and 251010 thousand females). Among these there were 234892 thousand in GoS, 249672 thousand in UNRWA schools and 18139 thousand in private schools. 408589 thousand (200125 females, 208464 males) in primary schools, and 94114 students (50885 females, 43229 males) in secondary schools (MEHE, 2016)

After MEHE began work in 1994 under the umbrella of Palestinian national authority, there is more attention in school health programs SHP; in all directorates of education, there is SH departments. At each school, there is one teacher called SHC, who is responsible on SHP supervision. SHC are trained, held meetings, workshops, gave them brochures, flyers and health manuals that serve students health.

In addition, the attention of MEHE to provide SH to be at the service of society through suitable school environment, including school buildings, school canteens, health units, steering awareness messages through: teaching tools, lectures, presentations for hygiene, health and scientific films and the environment, as well as students and staff trained in first aid and evacuation and firefighting operations. Nevertheless, our schools still suffer from some health problems.

### **1.7.2 Economic Status**

The GS is a small piece of land (about 365 Km<sup>2</sup>), located in the southern area of Palestine (PCBS, 2015). The same source denotes that, the total number of population who are living in GS at the end of 2014 is 1,790,010. For these reasons, GS characterized by a very high population density, especially; the available land not well occupied by human activities. (PCBS, 2015) mentioned that, the percentage of refugees in GS is 66.8% out of the total population. People in the GS are living in bad socioeconomic situations, where the average household size in 2013 is 5.8, with unemployment rate for population aged 15 year and over in 2014 is 43.9% (PCBS, 2015).Israeli siege since 2006 also affect socioeconomic status in GS.

Poverty data indicated that 17.8% of the households in the West Bank were suffering from poverty in 2015, while 38.8% of households in GS were suffering from poverty in 2015. (PCBS, 2015).

### **1.7.3 Health Status of School Children**

The governmental SH teams have examined students in the 1st, 7th, and 10th grades. In Palestine, in the 1st grade students, out of total examined students, 10,086 (17.96%) students diagnosed of having health or health related problems, such as decrease in visual acuity, lice infestation, short child, thin child, un-descended testicle. SH teams should therefore pay more attention to personal hygiene and should conduct more parental health education sessions about personal hygiene and proper nutrition. (MOH, 2012) Additionally, early detection, and treatment of any decrease in visual acuity is essential. In Gaza, the proportion of students who had health problems or health related problems in the 7th and 10th grades out of the total examined students was 2,779 and 4,892 students with a proportion of 17.5% and 18.3% out of the total examined students. Therefore, more efforts, strategies and health education campaigns should directed to the importance of early detection and treatment of eye problems and improving the nutritional status of students. (MOH, 2012).

The deteriorating political and economic conditions and the resulting social pressure due to siege and war have led to a state of general frustration and the revival of some negative health practices. (MOH, 2012).

### **1.7.4 The blockade and education in the Gaza Strip**

The blockade and restrictions on the movement of goods and people across Gaza's borders have constrained the functioning of the education system in Gaza, negatively affecting the quality of the education provided to Gaza's students. The lack of building materials needed to expand or repair existing educational facilities has resulted in overcrowding in schools and kindergartens. (UNICEF, 2010). In addition to, the Israeli occupation waged three wars on GS in 2008-2012-2014, some schools was completely or partial destroyed.

These recent events are not isolated incidents. Frequent major military attack campaigns, the 10-year blockade, and the resulting collective psychological trauma are destroying the hope and means of education and with it the future of Palestinian children and youth. During the war in 2014 year, at least 138 schools have been bombed or damaged, including 89 run by UNRWA with the full extent of damage still unknown, according to the latest, (OCHA, 2014).

.Almost 330 children have been killed and at least 2,000 injured. Over 250,000 displaced Palestinians are seeking refuge in 90 UNRWA schools, and over 15,000 in 19 government and private schools and other facilities, making it impossible to imagine that these schools will be ready to open in a few short weeks for the start of the academic year. (OCHA, 2014).

Students, teachers, and education institutions have frequently fallen victim to the conflict. . lasting eight days in November 2012, cost the lives of 11 students and four teachers, and 300 students were injured. (OCHA, 2014).

During the military onslaught, nearly 300 educational facilities (including kindergartens, schools and tertiary education institutions) were damaged or destroyed. Students missed at least six days of school and exams were disrupted. 250 students and 15 teachers were killed, while 856 students and 19 teachers were injured between December 2008 and January.

Forty-four UNRWA schools were used as emergency shelters for more than 50,000 individuals and at least 280 schools and kindergartens were destroyed or damaged. Again, schools were closed for weeks and semester exams disrupted. (OCHA, 2014).

At least 240 educational facilities damaged, 25 schools sustained major damage, approximately 180,000 students attending lessons in institutions damaged by the conflict, more than 462,000 basic and secondary school students missed at least 6 days of school in Gaza, exams were interrupted for many students, significant psycho-social impact to students residing in areas of severe damage and attending damaged schools; 11 students, 4 teachers/staff reported killed and 300 students reported injured by MEHE and 3,220 students affected by shelling of homes. (MOEHE, 2014)

All these events, effect on education in Gaza strip. Moreover, the shortage of needed tools in schools and teachers works and received salary partially or no salary .

## **1.8 Operational Definitions**

### **1.8.1 Role**

Functions and duties performed by everyone, as he a member of any organization have specific role, must carried out. (Nshwan, 1994).

*The researcher definition: The degree at which schools implement health duties that assigned to them. These duties related to public health practices.*

### **1.8.2 Public Health Practices**

The strategic, organized, and interdisciplinary application of knowledge, skills, and competencies necessary to perform essential public health services and other activities to improve the population's health. (Association of Schools of Public Health, 2007).

*The researcher definition: Health related behaviors, effect on students and community health and affected by knowledge, attitudes and perspective about health.*

### **1.8.3 School Health**

*The researcher definition: set of programs that concerned with health status in school which reflect on community health.*

### **1.8.4 Health Education**

Consciously constructed opportunities for learning involving some form of communication designed to improve health literacy, including improving knowledge, and developing life skills, which are conducive to individual and community health. (WHO, 2012)

*The researcher definition: educational program concerned with health and correct practices for health protection.*

### **1.8.5 Health Promotion**

Health promotion is the process of enabling people to increase control over their health and its determinants, and thereby improve their health. It is a core function of public health and contributes to the work of tackling communicable and non-communicable diseases and other threats to health (WHO, 2005).

*The researcher definition: specific program aimed to promote health and prevent disease.*

### **1.8.6 Governmental School**

Any educational institution run by MEHE or any other ministry or governmental instrument. (PCBS, 2011).

*The researcher definition: The educational school that run and under supervise by the MEHE.*

## **Chapter Two**

This chapter consist of different sections. The first section is conceptual framework, which describe the main domains affecting promoting public health practices among students, including dependent and independent variables. The second section contains definition of school health followed by description of school health components. The third section describe the role of school community in promoting public health practices. In addition to previous studies about the role of schools in promoting public health practices.

### **2 Literature Review**

#### **2.1 Conceptual Framework**

The researcher constructed the conceptual framework based on literature and personal experience in SH. The conceptual framework aimed to logically linking potential factors that could affect the role of schools in promoting public health practices.

##### **2.1.1 Dependent Variable**

In this study, public health practices is the dependent variable. According to (WHO, 2005) school can do an important role for health practices like provide a setting to introduce health information and health-promotion strategies to the community and teach healthy behaviors that will be applied throughout life (safe food handling, hand washing, not smoking, not abusing drugs or using illicit substances).

##### **2.1.2 Independent Variables**

There are some factors can effect on the role of schools on promoting public health practices such as:

### **2.1.2.1 Demographic characteristic of school health coordinators**

#### **Gender**

Gender states to the socially constructed roles, behaviors, activities and attributes that a particular society considers appropriate for men and women. (Smith, 2008) Promoting public health practices may be differing from female and male.

#### **Age**

Promoting public health practices may be differing according to SHCs age.

#### **Directorate of education**

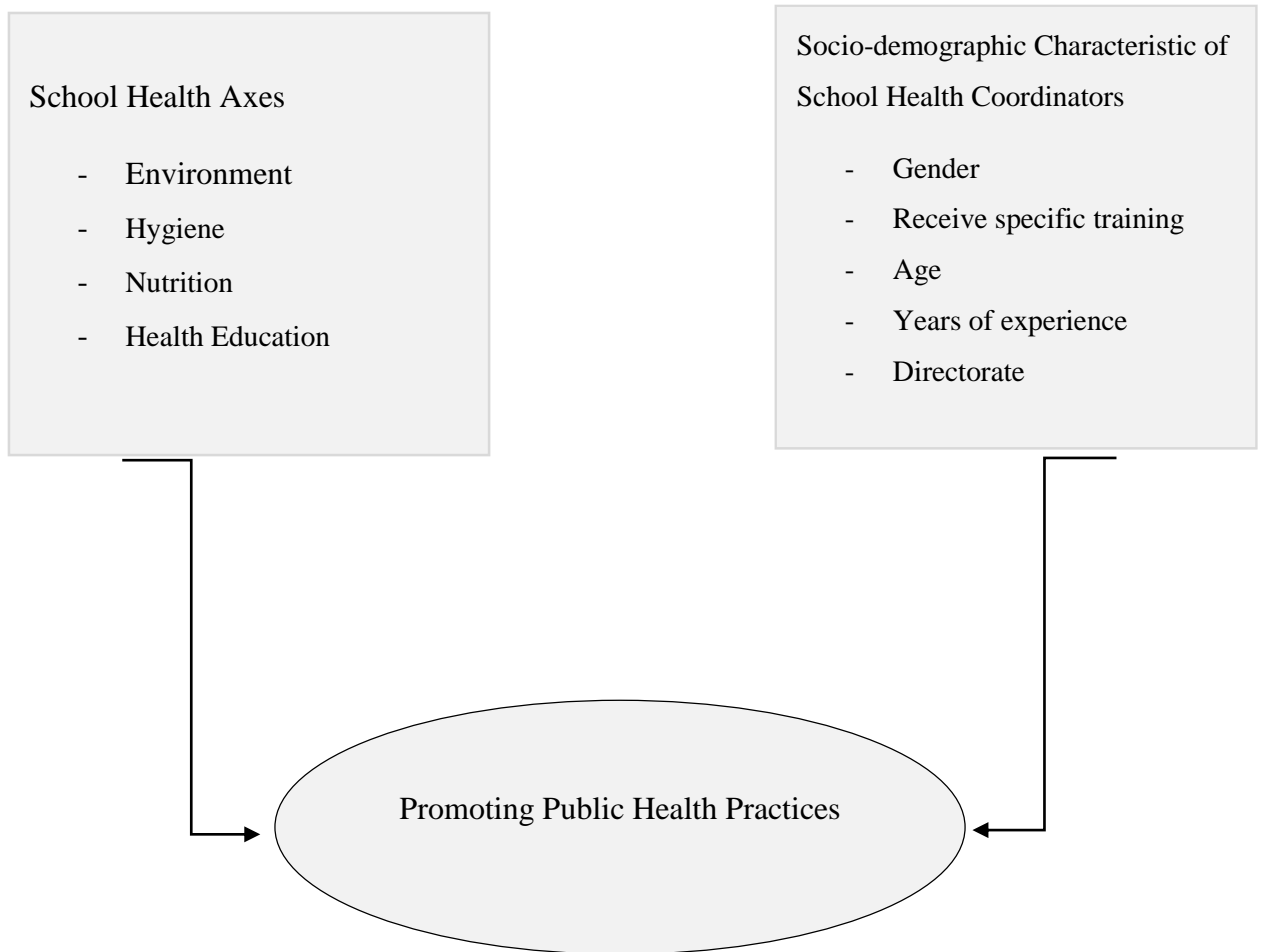
UNICEF survey (2010) shows that hand-washing practices before eating was lowest in Khanyounes with less than three percent reporting this practice.

#### **Years of experience**

Promoting public health practices may be differing according to the number of experience years.

#### **Receive specific training**

The findings reported in (Nassazi, 2013) study, that training and development have an impact on the performance of employees with regard to their jobs.



**Figure (2.1):** Conceptual framework, self-constructed.

## 2.2 School Health

*Because of “Health is a basic human right and a worldwide social goal.” (Park & Park, 2009).* There is increased attention on school as a health promoting setting (Sansolios & Egberg, 2011). In school it is possible to reach a large population over several years, and it is during the first years of life that most future health-related lifestyles, behaviors, habits and attitudes are formed ( Commission on Social Determinants of Health CSDH, 2008). Outside of the home and family context, children and young people spend most of their time at school, which has an influence on their health and well-being in general (James, 2010).

It is an integral part of every education system for achieving good health. A school can play a vital role to increase student’s health status. A School is a complete social setting of various aspects and these aspects are to be directed and coordinated in to a productive healthful school environment. (Lal, 2014).

School health services are an important component of the public health system and help assure that students are healthy, in the classroom, and ready to learn. SH services supplement, rather than replace parental responsibility and encourage parents’ attention to student health. The program designed to encourage parental awareness of students’ health status; discover and prevent health problems; and encourage utilization of the services provided by physicians, dentists and other community health agencies. SH services promote student health through prevention, early intervention, and referral for treatment of acute or chronic health problems. SH services enable students to attend school in a safe learning environment and reduce health barriers to learning. (John & Armstrong, 2007).

In addition, SH responsible for health appraisal, records review, preventive dental program, vision screening, hearing screening, growth and development screening, health counseling, referral and follow up of suspected or confirmed health problems, meeting emergency needs in each school, medication administration and medical procedures, prevention of communicable diseases, health education, referral of students to appropriate health treatment, consultation with students’ parent/guardian regarding need for health attention by an appropriate provider, and maintenance of student health information and records. (John & Armstrong, 2007).

According to (Al-Sarairah & Al-Rashidi, 2012) study, which aimed to recognizing the level of SH in the State of Kuwait from female managers and teachers' point of view. The study sample was consisted of (104) female managers and (670) female teachers, who were chosen by using stratified random sample method, with a percentage of (50%) female managers, and (5%) female teachers, from the study population. The questionnaire was used to collect the study data. The findings of the study indicated that the level of the SH in the primary schools in the state of Kuwait was medium, from the female principles' point of view. The level of the SH in the primary schools in the State of Kuwait was medium, from the female teachers' point of view. There is no significant differences at ( $\alpha < 0.05$ ) in the level of the SH in the primary schools from the female principal's point of view attributed to the academic qualification, practical experience, and supervised authority variables. There is no significant differences at ( $\alpha < 0.05$ ) in the level of the SH in the primary schools from the female teacher's point of view attributed to the academic qualification and supervised authority variables. There were significant differences at ( $\alpha < 0.05$ ) in the level of SH, from the female teachers' point of view attributed to the practical experience, in favor of teachers who had an experience, from 5 years and below, when they compared with teachers who had an experience from 6-10 years. In light of the findings, the teachers recommended the following: conducting continuous training courses for female primary school managers and teachers, to provide them with the necessary skills for SH. A warning female managers and teachers, about the importance of raising the level of the SH, by preparing suitable training programs. Evaluating the SHP, to determine the strength and weakness points, and applying the suitable procedures.

### **2.3 School Health Program Components**

According to Palestinian school health manual (2008), a comprehensive SHP consist of main components, which are:

#### **2.3.1 School Environment**

While schools have a huge capacity to improve the health of schoolchildren, they can also be harmful if the school environment is not safe and supportive. A safe school environment

should protect and promote both physical and psychosocial well-being. It should be free from violence, abuse, drugs, bullying and discrimination; it should be free of dangerous objects, have a safe structure and be secure from neighboring hazards (road accidents as an example); and it should provide potable drinking water, safe sanitation facilities for girls and boys with hand washing facilities to prevent the spread of diseases. (WHO, 2012) School environment include:

### **2.3.1.1 The physical environment**

The physical environment of school buildings and school grounds is a key factor in the overall health and safety of students, staff, and visitors. School buildings and grounds must be designed and maintained to be free of health and safety hazards, and to promote learning. Studies have shown that student achievement can be affected either positively or negatively by the school environment. Policies and protocols must be in place to ensure food protection, sanitation, safe water supply, healthy air quality, good lighting, safe playgrounds, violence prevention, and emergency response, among other issues that relate to the physical environment of schools. (NHDE, 2012).

The physical environment involving proper building design, lighting, ventilation, safety, cleanliness, freedom from environmental hazards that foster infection and handicaps, safe transportation policies, and having emergency plans in place.

(Lal, 2014) Study in Nepal was found that the attitude of students less positive towards the behavior of health in weak physical environment. Even though existing strategies were promoting SH and nutrition including awareness raising and improving the availability of funds, transport and supply education and health kits, encouraging for institutional capacity building, in reality most of the physical environment were found poor, health facilities were not available in schools. As a result, the students have not been able to use physical facilities for safe schooling.

The best practices for schools about the physical environment is firstly every school should have a health and safety committee comprised of administrators, classroom teachers, SHC, maintenance personnel, laboratory science teachers.

The committee should develop and ensure the implementation of plans for safe, healthy and well-maintained school buildings and grounds. The committee should be empowered to deal with on-going maintenance and repair issues, as well as on-going and emerging health or safety issues related to the physical environment of schools and school ground. In addition to every school should practice emergency response drills for a variety of likely hazards and situations and Schools should implement programs to maintain good indoor air quality. Moreover, schools should establish procedures for managing chemicals used in science classes to include storage, reordering, and disposal. (NHDE, 2012).

### **2.3.1.2 The policy and administrative environment**

Consisting of policies to promote health and reduce stress, and regulations ensuring an environment free from tobacco, drugs, weapons, and violence. According to Palestinian school health manual (2008). Psychosocial environment including a supportive and nurturing atmosphere, a cooperative academic setting, and respect for individual.

#### **❖ The role of school management in school environment according to Nelly (2008)**

##### **a) -Physical environment**

- Ensure the safety of school workers and students.
- The school is well maintained and neat.
- Classrooms are well ventilated and neat.

##### **b) -Social environment**

- Mutual trust and respect between teachers and students.
- Students help each other.
- Learners respect and protect the environment;
- There are norms and internal rules and regulations;
- School activities are coordinated;

### **2.3.2 School Nutrition**

During the last 3 decades, the prevalence of obesity has tripled among persons aged 6--19 years. Multiple chronic disease risk factors, such as high blood pressure, high cholesterol levels, and high blood glucose levels are related to obesity. Schools have a responsibility to help prevent obesity and promote physical activity and healthy eating through policies, practices, and supportive environments. School health needs more attention in promoting healthy eating and physical activity, including coordination of school policies and practices; supportive environments; school nutrition services; physical education and physical activity programs. (Centers for Disease Control and Prevention, 2011).

❖ **SH nutrition services include :**

- Growth and development screening with body mass index.
- Nutritional assessment especially canteens.
- Nutrition education
- Dietary and nutrition counseling (John & Armstrong, 2007).

❖ **The same source considered the following as indicators of possible nutritional problems :**

- Abnormal growth patterns – under or overweight
- Inadequate or bizarre dietary patterns or eating disorders
- Frequent infections/illnesses
- Chronic disease requiring dietary modifications
- Dental caries

Nutrition services program practices in many schools continue to need improvement. Districts and schools should implement more food preparation practices that reduce the total fat, saturated fat, sodium, and added sugar content of school meals. In addition, opportunities to eat and drink at school should be used to encourage greater daily consumption of fruits,

vegetables, whole grains, and nonfat or low-fat dairy products. (O toole, Anderson, Miller, & Guthrie, 2007).

According to (Jalambo, 2011) study, the overall prevalence of anemia (Hb lower than 12g/dl) among female secondary students was 33.5%, and the overall percentage of anemia (Hb lower than 11g/dl) among pregnant adolescents was 26.9%. Anemia was found to be more prevalent among adolescent with low socioeconomic levels. In addition, skipping breakfast was reported by 60% among students and 71.2% ate only 1 to 2 meals/day. The results indicated that the overall prevalence of underweight, and high body mass index were 1.3% and 19.9% respectively. The study concluded that anemia still appears to be a public health problem among female secondary students and pregnant adolescents. Approximately one of three female students in the studied group was diagnosed to be anemic. The study showed that anemia existed among female students before conception. This data show the need for a public health program concerning prevention and early diagnosis of anemia. It is concluded that different socioeconomic variables and dietary habits factors showed statistical significance for anemia among female students. Interventional nutritional education programs are recommended to improve the dietary habits among adolescents.

( Al-Demah M. H., 2012) Was conducted study to investigate the impact of some lifestyle determinants and body mass index on school achievement of ninth grade students in the district of Tulkarm, and study the factors associated with them. The study was carried out on 781 ninth grade students (407 females, 374 males) attending GoS of the district. The results showed that 62.9% of the students (46.7% of females, 80.6% of males) take breakfast before going to school. Low concentration in class was associated with skipping breakfast, smoking, non-daily consumption of fruits, tiredness, psychological stress at school, and waking up late and was associated with poor school achievement. Daily consumption of fruits improved student scores in Technology, English language, and the overall average. About 6% of male students were smokers (none of the females declared smoking) and smoking was associated with low school achievement. There were no differences in school achievement between students with regard to eating lunch and dinner, body mass index status, weekly physical activity, daily time spent watching TV, daily time spent using computer and method of transport. These results should raise awareness among

students and parents for the need to follow healthy lifestyle such as eating breakfast and focus on eating fruits daily, to avoid smoking, to have good sleep-wake up habits.

Also (Lal, 2014) study has been concluded by feeling the need of knowledge about SH and nutrition not only for teachers, but also students, head teachers and parents, and also other categories of people. Children of today are the teachers of tomorrow. The health and environment education is extremely important to reduce the SH and environment.

### **2.3.3 Hygiene**

Hygiene is defined as any application made and any sanitary precaution taken to be protected from environments that can damage our health. (Erkal & sahin, 2011).

Islam is the religion exposed to the prophet Mohammed (PBUH) in 610 AD over a 23-year period, these exposes are documented in the Qur'an, which covers a full code of life for all Muslims and delivers godly guidance on the most important aspects of life (Ahmed et al., 2006). Muslims throughout the world have very high standards of personal hygiene, because Islam seats great highlighting on both physical and spiritual, hygiene and cleaning (Stacey, 2009). Fischman (2000) supported the idea by giving an example that Islamic teaching emphasize the use of a special wooden stick, called siwak, for cleaning the teeth and preventing bad breath. A good number of the verses of Holy Quran and traditions of Prophet Mohammed deliver best guideline for human beings in order to enjoy the maximum standard of personal hygiene than order people of the world (Bhat & Qureshi, 2013).

Personal hygiene is the most important factor in health promotion and disease prevention since transmission of communicable diseases occurs mostly due to direct contact with those who are risk or carriers of pathogens, especially in crowded places at homes and schools (Bloomfield, et al., 2007; UNRWA, 2010). As addressed by UNRWA, health problems related to personal hygiene are still prevalent among school children. For

example: pediculosis was found in 1.9% and scabies in 0.2% of new entrants (UNRWA, 2010).

Improved hygiene and sanitation is very important aspect to health of children in schools, homes and community (Bartram & Cairncross, 2010). Although, schools are often more than just places for learning and behavior change they become a health risk if sanitation and hygiene facilities are absent in schools, or are badly maintained and used (Lidonde, 2004). During the 1997-1998 cholera epidemics, the Uganda government spent US \$ 23 million in health care costs. Their schools were quickly becoming a place for disease spread and 560 schools had to be closed due to the lack of adequate and appropriate facilities (Lidonde, 2004).

#### **2.3.4 Health Education and Promotion**

Health education builds students' knowledge, skills, and positive attitudes about health. Health education teaches about physical, mental, emotional and social health. It motivates students to improve and maintain their health, prevent disease, and reduce risky behaviors. Numerous studies have shown that healthier students tend to do better in school. They have higher attendance, have better grades, and perform better on tests.

Health education provides formal opportunities for students to acquire knowledge and learn essential life skills that can foster healthy behaviors, such as physical activity and healthy eating. Taught by qualified teachers, quality health education includes instruction on essential topics and skills that protect and promote physical, social, and emotional health and safety and provides students with many opportunities to practice health-enhancing behaviors.(CDC,2013).

Health Education is bringing about behavioral changes in individuals, groups, and larger populations from behaviors that are presumed to be detrimental to health, to behaviors that are conducive to present and future health. ( Glanz, Rimer, &Viswana, 2008)

The American national health education system are written expectations for what students should know and be able to do by grades 2, 5, 8, and 12 to promote personal, family, and

community health. According to (Khann, Brener, & Allensworth, 2009) there is standards, which provide a framework for curriculum development and selection, instruction, and student assessment in health education:

1. Students will comprehend concepts related to health promotion and disease prevention to enhance health.
2. Students will analyze the influence of family, peers, culture, media, technology, and other factors on health behaviors.
3. Students will demonstrate the ability to access valid information, products, and services to enhance health.
4. Students will demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks.
5. Students will demonstrate the ability to use decision-making skills to enhance health.
6. Students will demonstrate the ability to use goal-setting skills to enhance health.
7. Students will demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks.
8. Students will demonstrate the ability to advocate for personal, family, and community health.

WHO (2007) found that children can be important represents for change. Therefore, health education in schools can help encourage a community wide understanding of disease such as malaria and the need for prevention which can generate a demand for health services (both private and public) to provide access to reasonable and suitable treatment. Even thought, current thinking about hygiene promotion tends near a vision that the most effective way to change performance is by mass social marketing of single rule-based hygiene messages (Bloomfield et al., 2007).

The study of (Saher, 2012) aimed to identify the role of SM in activating health education at the primary stage of Gaza governorates. To achieve this goal, researcher build a questionnaire about; the role of SM in the activation of health education at the primary stage the provinces of Gaza from the perspective of managers and health workers. The sample consisted of 125 employees from school staff of districts nationwide GS (the northern GS - Gaza City - the middle area - Khan Younes - and Rafah). The study used a descriptive approach has been randomly selected, and when analyzing the results were used: frequencies and percentages and Pearson's correlation coefficient and t-test, test and analysis of variance test , the arithmetic mean, standard deviation and relative weight. Found that the role of SM in activation of health education from the perspective of managers and health workers in Gaza governorates was high .And the relative weight (74.61%). In addition, the role of SM to activate food awareness with relative weight (79.54%). In addition, the results showed that there is a role for SM in activating safety and security awareness with relative weight (76.72%). While the study showed that there is a role for SM in activating sports awareness with relative weight (73.18%), the study also demonstrated that there is a role for SM in activating the awareness of reproductive health, the relative weight (63.93%), and there is a role for SM in activating mental health awareness with relative weight (74.56%).

While (Al-Qarny, 2007) study found that the degree of the role of SM in achieving the goals of health education in elementary children of AL-Taif City schools was average as a whole is (3.39) .The degree of the role of SM achieving the means of health and safety was high average is (3.63). The axis of health education was the lowest average is (2.51). The role of SM in securing good environment suitable for good nutrition for elementary school of high degree in all items of this axis: (3.89). The role of SM in achieving hygiene was high in most of the items of this axis (3.56).

### **2.3.5 Health Services**

#### **2.3.5.1 Components of the School Health Services Program**

According to (Department of Defence, 2004) all schools shall have, an integral part of the education program, a health services program managed by a SHC. The school health

services program is not meant to take the place of health care provided by the family or other community agencies. Through SHP children and families can develop the knowledge, attitudes, beliefs and behaviors necessary to remain healthy and to perform well in school. The school health services program includes the following elements (Department of Defence, 2004) :

1. Specific written emergency procedures coordinated with available local medical resources.
2. Illness and accident services with referral to appropriate community agencies
3. Health assessment including vision, hearing, dental care, and development screening.
4. Early identification of health problems and intervention plans.
5. Monitoring epidemiological and chronic diseases.
6. Communicable disease control including an immunization program.
7. Health counseling and crisis intervention .
8. Health education including wellness promotion and disease prevention for groups and individuals
9. Documentation of health services especially on student health record
10. Physical Education and Sports.

#### **2.3.5.2 Health Screening**

By the experience of researcher in SH, health screening which implemented by the MOH team, consist of:

- Hearing Screening Procedures
- Vision Screening Procedures
- Growth and Development Screening Procedures

#### **2.3.5.3 Preventive services**

Based on seasonal and refresher vaccines at several students age levels, monitor the availability of health conditions in school canteens, monitoring of the school environment,

and provide awareness activities like lectures, meetings, health education leaflets and participating in various health events. (Al-Sarairah & Al-Rashidi, 2012).

#### **2.3.5.4 Immunization**

Immunization is provided by the Palestinian authority MOH and UNRWA (for those with a refugee status) The MOH and UNRWA have unified their immunization schedules. Data show that the proportion of immunized children increased from 49 percent in 1996 to 96.8 percent in 2006 to 98.5 percent in 2008. The percentage is high in both the West Bank and GS, and for all types of localities (urban, rural, refugee camps). (UNICEF, 2010)

The MOH and UNRWA offers two main programs of vaccination; the first during infancy and early childhood, and the second program is the booster doses of DT, TOPV in the first elementary school students, rubella vaccines that are given to female students at 12 years and finally DT vaccine to student at 9 preparatory school. Generally, SH teams are succeed in maintaining high coverage rate. (MOH, 2005).

#### **2.3.6 Promote the Role of Local Community**

##### **2.3.6.1 Parents and community members**

Benefit by gaining a broader knowledge base about local health problems, learning important new health information and skills, and taking part in their children's education. They gain assurance that their neighborhood school is open to their ideas and participation. (WHO, 2012). In addition, benefit by having students and teachers involved in community activities. Working in collaboration with the school can also help organizations make their services or products known or accessible. Educated and healthy students are an asset to the community as a whole. (WHO, 2012).

### **2.3.6.2 Promote Workers Health at Schools**

School health can enable school staff to improve their health status. Such as health assessments, health education, and health-related fitness activities; these activities encourage school staff to pursue a healthy lifestyle that contributes to their improved health status, improved morale, and a greater personal commitment to the school's overall coordinated health efforts. This personal commitment often transfers into greater commitment to the health of students and creates positive role modeling. (Cavill N, et. al, 2006).

The success of health promoting schools depend heavily on teachers' training. However, teachers think mainly about SH in terms of curriculum have little understanding of how community partnership might work, and have little pre-service and in-service training. Therefore, health education and health promotion should be an essential element in teacher training. There are several important areas for teacher training and curriculum development. (Lee et al., 2003)

The same source found that, there was a strong need for change in the long established traditional approach to SH education, which concentrated on its physical aspects through largely negative messages. It was concluded that the key determinant of the successful and efficient implementation of health and education programs is the ability of the teachers to understand the basic concepts and communicate their meaning to others. Teachers should provide with practical advice about conflict resolution. This requires a substantial shift from didactic to much less formal teaching methods, which would create difficulties for some teachers and pupils. In another study, it was also revealed that the less frequently tackled issues in SH were mental health, accident prevention, staff health, and developing links with the wider community.

Therefore, there is opportunities for school staff to improve their health status through activities such as health assessments, health education, and health-related fitness activities. These opportunities encourage school staff to pursue a healthy lifestyle that contributes to their improved health status, improved morale, and a greater personal commitment to the school's overall coordinated health program. This personal commitment often transfers into

greater commitment to the health of students and creates positive role modeling. Health promotion activities have improved productivity, decreased absenteeism, and reduced health insurance costs. (Gereige, R & et. al, 2016).

## **2.4 School Health Committee**

SH committee consist of school manager, SHC, teachers, psychological guidance, two person from local community and about sixteen students. This committee aims to increase health awareness among students, establishing good health values, behavior, and provide health services to students. (MEHE, 2008).

According to (AL-Gergawi & Aga, 2010), SH committee responsible for:

- Monitor cleanliness of classrooms, school arenas, and facilities.
- Availability of fresh air, existence of proper lighting, clean water, disinfectants, and student's health level, Etc.
- Follow-up to the students commitment on healthy habits such as not throwing garbage on the ground, not damage property, and a commitment to order.
- Help injured or sick students, who need of medication, devices, medical glasses, special seats, and others.
- Record, resist, alert students on diseases that may affect them, and the search for causes.
- Monitor school canteen especially cleanliness and food diversity.
- Develop health seminars, and invite doctors to give lectures, about student's health problems.
- Prepare Leaflets, pamphlets about SH problems.
- Visits to health institutions to learn about the services, which they provide.
- In addition, there are others SH activities, which could be, improve students health level.

## **2.5 The Role of School Management in Health Promotion**

According to (Msad, 2005), the main tasks of SM in SH promotion is:

1. Follow-up to the students with clear medical conditions.
2. Follow up the implementation of first-aid course.
3. Promote health awareness among students.
4. Presentation for parents about health rules.
5. Supervise of SH nutrition.
6. Supervise hygiene and means of safety inside the school.
7. Attention of school facilities and permanent maintenance.

## **2.6 The Role of School Health Coordinator**

SHC often is the teacher of science, or have an experience in health. The model affect behavior of his disciples one of the main tasks is the following:

Distributed works between health group members, prepared for regular meetings. In addition, he is responsible for plans and programs preparation, health education, help in the discovery of pathological cases, follow-up, referral pathological cases to health institutions and take the care, also he is responsible for SH room; create a first aid kit in school and participation in the SH events. (AL-Gergawi & Aga, 2010).

## **2.7 The Role of Teachers in School Health Promotion**

According to (AL-Gergawi & Aga, 2010) teachers played an important role in SH promotion by:

1. Discover patients' students while they are in classroom and in the morning a queue and transferred him to the hospital or inform parents whenever necessary.

2. The teacher can instill values and healthy habits in students by using required personal habits, such as washing hands before and after eating and take care of the cleanliness of the eyes and mouth, teeth, nails and feet.
3. The teacher educating students the importance of food and its role in the body growth and protect him from disease.
4. The teacher have an important role on health education topics.

## **2.8 The Role of Cleaners in Promotion of School Health**

Cleaners are required to provide services for students to help in the delivery of SH services. Cleaner responsible for hygiene services for example, washing school with soap and water and moving garbage to places of gatherings every day. (AL-Gergawi & Aga, 2010).

## **2.9 School Health Status in Gaza Strip Governmental School**

The school is an appropriate place for the provision of preventive services and early detection of physical and psychological problems for the age groups 6-18 years. Through school, programs can directly reach the early childhood stage and a wide segment of society to offer health awareness activities. These activities about the importance of proper nutrition, hazards of smoking and substance abuse, road safety ( by including it in the school curriculum ), eliminating violence, expanding the SH, school counselling program, reaching children with health problems to prevent complications, ensuring children's safety, and managing any emergency situation. . (MOH, 2012).

For example, by the revision of statistics and MOH annual reports especially the main cause of death among children age group (5-19) years, the results indicated that during 2011, the mortality rate due to traffic accidents was 12.1% in west bank, the second highest among all causes of death, after malignant neoplasm . (MOH, 2012).

There is many studies described the SH status in GS -Palestine.

The study of (Al-Gergawi & Aga, 2010) aims to exploring the situation of Health education application in GoS in Gaza City. The researchers used analytical descriptive method in the study. The researchers designed and prepared a questionnaire to gather and collect the data and information of the study. The researcher applied such questionnaire on a random sample of health education supervisors composed of (129) teachers selected from (50) government schools in Gaza City.

The study showed a group of results:-

-The school supervises SH environment carefully. It showed standard diversion (12.266) with a rate 91.46%.

-The results showed that the school has a role in teachers and students health care. It showed (10.87) standard diversion with a rate 87.51%.

-The school has a role in student health culture. It showed (48.947) standard diversion with a rate 85.04%.

The researcher recommended that the role of teacher in SH field should be activated by holding seminars, training courses and sessions.

The study of AL-Serhy (2014) aimed to evaluate the reality of school canteen in the light of Palestinian guidelines, in terms of construction, environmental condition, staff, and food. The study was implemented on Gaza governorate, with the 93066 students, were selected from 82 schools. The main results of this study was the canteens meet the criteria of Palestinian guidelines, with the following ranking of components: specification of canteens constructions, supervision of canteens work, internal equipment's, specification of food provided, workers inside the canteens, and finale external specification of the canteen. There are statistically significance differences between the mean sample responses on the assessment canteen in the light of Palestinian guidelines due to the variable supervisor authority (Government – UNRWA), the differences have been in favor of government.

## **Chapter Three**

### **3 Methodology**

This chapter contains a description of the methodology, study design, study population, study setting, study period, eligibility criteria, sampling process and calculations, ethical consideration, study instruments, pilot study, data collection, scientific rigor, data entry and analysis, and limitations of the study.

#### **3.1 Study Design**

The design of this study is a descriptive, analytic, cross-sectional and triangulated one. The researcher has been used previous methods to determine the role of school in promoting public health practices in GS GoS. The descriptive study describes the investigated phenomena as they naturally happen (Greenwood & Levin, 2006). Cross-sectional studies portray a snap shot of the prevalent situation as in the studies variables of interest in a sample are assessed only once to determine the relationships between them (Singh, 2007). Analytical research provides a robust framework that facilitates scholarly discourse across a wide variety of conceptual and empirical domains (Whetten, 2002). In addition, this study has depended on methodological triangulation between quantitative method (questionnaire with SHC), and qualitative method (two focus group discussion with students, and two others with the parents).

#### **3.2 Study Population**

The study population is defined as all components of the phenomenon studied by the researcher, so the population for this study included two categories of populations:

### In Quantitative Part

School health coordinators totaled **395** working in GoS in the GS. Annex (11) describe distribution of study population. (MEHE, 2015). MEHE schools are separated by gender, (male SHCs working in males schools, while females SHCs working in females schools)

### In Qualitative Part

The population for qualitative part in this study was caregivers (mainly the mothers) in the directorates of education in north and east Gaza in addition to students in the age group fifteen and sixteen years old that represent grades nine and ten . the researcher selected theses category because they pass from various level, then they could describe the school health status and the role of schools in promoting public health practices.

### **3.3 Study Period**

The questionnaire, which represents the basic tool for this research was designed and referred to both academic and expertise in the school health field. The researcher also obtained an approval on 22 of August 2016, from the (MEHE) to work with the schools to be targeted within the research. The pilot study was conducted at the beginning of September 2016. The data collection was performed and completed in the last week of September 2016. Data entry was finished by the half of October 2016, followed by data analysis and report writing until November 2016.

### **3.4 Sampling Process and Calculation**

Five directorates of education were selected as geographical represented sample from the seven distributed in the Gaza strip in which they were representative for all Gaza Strip governmental schools (North Gaza, Gaza, Middle Area, Khan Younes, and Rafah). Annex (4) show the Distribution of education directorates on Gaza Strip map. Using the Open Epi-Info sample size statistical calculator to calculate the number of study sample. The recommended sample by the program equals 195. The researcher increased the sample up to 205 to cover for possible non-respondents.

Thereafter, according to the percentage illustrated in the table (2), a (205) of schools was selected randomly from the schools list, where the designed questionnaires were distributed to be completed by the SHC in each selected school. A sample size of 22 pilot questionnaire to test the internal consistency, validity and structural stability of the questionnaire is distributed. After the confirming of the validity and integrity of the test questionnaire, the questionnaire distributed to the study sample with a confidence level of 95%.

The next sample is caregivers (mainly the mothers) in the directorates of education in north and east Gaza with twenty mothers in addition to students in the age group fifteen and sixteen years old that represent grades nine and ten with total twenty students. Theses sample was selected randomly after select two schools randomly, which is Amouas High Basic School for girls in North Gaza and Al-Bader High Basic School for girls in East Gaza.

### 3.5 Study Setting

This study conducted in the GoS for the academic year 2016- 2017 in the five governorates of Gaza: North Gaza, Gaza, Middle Area, Khan Younes, and Rafah. The following table (3.1) explain sample distribution according to directorates of education in Gaza strip.

**Table (3.1) sample distribution according to gaza directorates of education .**

No	Directorate	No of School	Percent
1	North Gaza	49	18%
2	Gaza	59	22%
3	Middle Area	33	12%
4	Khanyounis	30	11%
5	Rafah	34	13%
Total	Five directorates	205	100%

### **3.6 Eligibility Criteria**

#### **3.6.1 Inclusion Criteria**

##### In Quantitative Part

All school health coordinators for the academic year 2016- 2017 in governmental schools-GS.

##### In Qualitative Part

1. All school students in the grades nine and ten who are enrolled at governmental schools in the directorates of education in north and east Gaza
2. All caregivers (mainly the mothers), particularly the mothers for all students who are included in the study.

#### **3.6.2 Exclusion Criteria**

##### In Quantitative Part

Teachers for other subjects at schools of the study area.

##### In Qualitative Part

- 1- Students who are enrolled in UNRWA and private schools at grades nine and ten.
- 2- All students except for the ninth and tenth graders.
- 3- Mothers of students who are excluded from the study criteria.

### **3.7 Response rate**

The total number of the SHC who participated in the study was (n=205) for the North, Gaza, Middle and south areas in Gaza governorates as indicated in the Table (3.2), the study response rate was 82.9 %.

**Table (3.2) Number and Percentage of Complete and Missing Questionnaires**

	<b>Frequency</b>	<b>Percentage</b>
complete questionnaires	170	82.9%
Missing questionnaires	35	17.1%
Total	205	100.0%

### **3.8 Ethical and Administrative Considerations**

Academic approval was requested from the School of Public Health at Al-Quds University. And official letter was obtained from "Helsinki Committee" at MOH on the first day of august 2016. (Annex 1).

Another approval was obtained from the school of public health at Al-Quds University asking the MEHE to facilitate the researcher work dated on 21 August 2016 (Annex 2); Then the administrative approval obtained from MEHE on 22 August 2016 in order to facilitate the process of data collection. (Annex 3).

In addition, there is a cover page was added to each questionnaire to explain the study objectives and purpose. (Annex 5).

A verbal approval was also taken from students and caregivers who participated in the study and a verbal explanation about the study objectives and purpose delivered to them.

### **3.9 Study Instrument**

The researcher conducted three tools in order to collect quantitative and qualitative data from the school health coordinators, students and caregivers:

#### **3.9.1 Quantitative Method**

The self- Administrated questionnaire was the main instrument in data collection. Annex (6) shows SHCs questionnaire. A questionnaire in Arabic was developed to accomplish the

objectives of this research to determine the role of schools in promoting public health practices. The questionnaire was adapted from previous studies (Al-Demah M. , 2012), (Al-Qarny, 2007), and (AL-Gergawi & Aga, 2010) then evaluated by a panel of experts in public health to carry out the study, Annex (10) shows the list of the experts who responded by giving feedback and comments on the study instruments. After that, the researcher translate the questionnaire to English language.

It included questions related to socio-demographic factors specific for SHCs and items to determine the role of school in promoting public health practices. The questionnaire included two sections. The first section included personal details (school name, Age, sex, years of experience, place of residence and training courses) about SHCs. The second section include items in order to answer the research questions and SH axes. The questionnaire covered the following items: school environment, hygiene, school nutrition, and health education.

The first axis: the environment and consists of (8) vertebrae.

The second axis: hygiene and consists of (14) items.

The third axis: Nutrition and consists of (11) items.

The forth axis: health education and consists of (23) items.

Annex (6) shows the questionnaire items.

The gradient (1-5) has been used to measure the responses of the respondents to the questionnaire. The researcher has chosen the gradient (1-5) to respond, and the closer the answer of 5 indicated high approval on what is stated in paragraph concerned.

There are five possible responses to each statement ranging from

- Completely Agree (5)
- Agree (4)
- Neutral (3)
- Disagree (2)
- Completely Disagree (1)

### **3.9.2 Qualitative Method**

The other instruments was open-ended questions. The researcher within focus groups asked those questions with students and caregivers separately. Annex (7) shows the focus group dimensions for twenty students from east and north Gaza (two focus group as one for male and the second for female); while Annex (8) shows the focus group dimensions for twenty students mothers (one from east Gaza and the other one from north Gaza).

These groups conducted as separately to collect qualitative information to support the data obtained from the study.

### **3.10 Pilot Study**

The pilot study was implemented on a sample of 22 school health coordinators from north and east Gaza, following by two focus groups the first one for students and the second for caregivers. Through the pilot period, the researcher determine the problems with the tools. In addition, the researcher identified the consumed time for collecting data. The piloting showed that the tools cover all the study objectives. Finally, minor modification took place on some questions in the questionnaire, other questions were deleted.

### **3.11 Data Collection**

The data were collected only by the researcher. The researcher met the head of school health department and provided information about the purpose and objectives of the study. The same information were given to SHCs, students and caregivers. In each selected school, there is SHCs who are responsible for school health committee, they were asked to complete the questionnaire and take part of time to illustrate the purpose and objectives of the study, in addition to instructions regarding the questionnaire.

Coordination was done between the researcher, school managers, and students to invite the mothers for the focus group discussion. Focus groups were conducted after data analysis.

## **3.12 Scientific Rigor**

### **3.12.1 Quantitative Part (questionnaire)**

#### **3.12.1.1 Validity**

- **External Validity**

External validity is the extent to which the results are generalized to populations. To avoid any ambiguity in the questions; the researcher used random selection for the sample and designed simple tool that can be used to collect data easily.

- **Content Validity**

Content validity is the judgment of the degree to which the items and the questions in a test adequately sample the domain of interest (Johnson & Larry, 2000).

The questionnaire and focus groups questions were evaluated by a group of experts to assess its content validity. The researcher sent the constructed measurement tools with an enclosed cover letter about the objective of the study to 10 experts working in the field of health especially school health field to give their views on the dimension statements of the measurement tools (Annex 10). Their comments were taken in consideration. In addition, face validity that is defined as the extent to which the tool appears appealing. Moreover, to examine this, a pilot study was conducted before the actual data collection to show the sample responses to the questionnaire and how they understand it. All These activities enhanced the validity of the questionnaire and focus groups questions. The researcher apply correlation coefficient statistical test to proof that the items is satisfactory factor of validity, the results were mentioned in the (Annex 9). In addition, the researcher apply correlation coefficient statistical test to proof that the axis is a satisfactory factor of validity, the results were as follow in the (table 3.3):

**Table (3.3) Correlation coefficient between each Axes and process criterion.**

#	Axes	N. items	Pearson Correlation coefficient	Sig.	
1	<b>The Role of Schools in Promoting Public Health Practices</b>	<b>Environment</b>	8	0.788*	0.000
2		<b>Hygiene</b>	14	0.903*	0.000
3		<b>Nutrition</b>	11	0.856*	0.000
4		<b>Health Education</b>	23	0.925*	0.000

\*Correlation is significant at the 0.05 level

### 3.12.1.2 Reliability

Reliability is the ability of a measurement instrument to measure the same thing each time it is used (Singh, 2007). In addition, reliability refers to the consistency or stability of the scores that are obtained from the tests or assessment procedures (Johnson & Larry, 2000). To assure the reliability of the instrument used in the study, the researcher apply different statistical tests (Cronbach's alpha and Split half method) the results was as follow in the ( table 3.4).

It is clear from the results shown in Table (3.4), that the value of Cronbach's alpha coefficient elevated to the axis of the role of schools in promoting public health practices in schools, ranging between (0.740-0.908). While the total for all axis is (.947), and the way of Split-Half Coefficient results were similar to the way Cronbach's alpha coefficient ranging from (0.790 -0.952), while the total for all axis is (0.969).The results are proof enough that the axis's have a satisfactory factor of reliability.

**Table (3.4) the result of using Cronbach's alpha and Split half method tests**

#	Paragraphs	Number of paragraphs	Cronbach's Alpha	Split-Half Coefficient	
1	<b>The Role of Schools in Promoting Public Health Practices</b>	<b>Environment</b>	8	0.798	0.831*
2		<b>Hygiene</b>	14	0.902	0.931*
3		<b>Nutrition</b>	11	0.740	0.790*
4		<b>Health Education</b>	23	0.908	0.952*
	<b>The total of four axis</b>		56	0.947	0.969*

\*Correlation is significant at the 0.05 level

### 3.12.1.3 Normal Distribution Test:

Kolmogorov-Smirnov test was used to test whether the data follow the normal distribution or not, and the results were as shown in Table (3.5).

**Table (3.5) Normality distribution test**

#	Paragraphs	Number of paragraphs	Kolmogorov-Smirnov Z	(Sig.)	
1	<b>The Role of Schools in Promoting Public Health Practices</b>	<b>Environment</b>	8	0.694	0.722
2		<b>Hygiene</b>	14	0.761	0.608
3		<b>Nutrition</b>	11	1.139	0.149
4		<b>Health Education</b>	23	0.444	0.989
	<b>The total of the four factors</b>		<b>56</b>	<b>0.429</b>	<b>0.993</b>

It is clear from the results shown in Table (3.7) that the p-value (Sig.) to all fields of the study was greater than the level of significance (.05), then the distribution for each field is normally distributed, so parametric tests was used to answer the questions of the study.

### **3.12.2 Qualitative Part (Focus Groups)**

To assure the trustworthiness of the qualitative part of the study, the following were done: First, a peer check was done to revise the focus group questions to assure that they cover all the required dimensions. Then, a member check was done to assure accuracy and transparency of the transcripts during the focus group. Prolonged engagement was done as the researcher tried to probe for answers and cover all the focus group dimensions properly. In addition, recording focus groups enhanced tracking up facts and re-check the accuracy of the transcripts. Finally, all the transcripts and recordings were kept for tracking the information by others at any time (Audit trail).

### **3.13 Data Entry and Analysis**

#### **3.13.1 Quantitative Part**

Data were carefully checked and verified to drop out any incomplete questions. The researcher was used Statistical Package of Social Science (SPSS) program version 21.0 for data entry and analysis. Data analysis was carried out through reviewing and coding of the questionnaires, data cleaning was done through checking out a random number of the questionnaires and through exploring descriptive statistic frequencies for all variables (percentage, mean, and standard deviation for all variables). Relative weight was used to know the amount of the percentage of each of the area. Cross tabulation for main findings of the relation between dependent variable public health promotion and independent variables such as directorate, gender, years of experience, and specific training. Moreover advanced statistical tests such as T test or one-way ANOVA test to compare means of numeric variables.

#### **3.13.2 Qualitative Part**

Open coding thematic analysis method was used to analyze the transcripts of the focus group. The researcher obtained the main findings from the transcripts of the focus group. Then,

categorization of related ideas, and comparison and integration between the quantitative and the qualitative findings were done to create rich items for discussion and representation.

### **3.14 Limitations of the Study**

- The study was include only governmental school, while other providers not be included such as (UNRWA) or private schools.
- The study was focus on school health coordinators regardless to other teachers' opinions.
- Some of SHCs were not answering the questions in a comfortable way, especially the questions related to school rule.
- It was very difficult to gather the caregivers for the focus group.
- Frequent cut offs of the electricity affected the timely planned data entry, analysis and report writing.
- Limited resources and lack of local literatures about the study of concern.

## **Chapter Four**

### **4 Results and Discussion**

This chapter contains the main study results based on the results of the statistical analysis. Answering the study questions was reached through analysis of variables, and stand on the variables of the study. Which included (Directorate, age, sex, years of experience, specialization, and receive specific training), so a statistical treatment of the data collected from a questionnaire study was done, by the use of statistical packages for Social Studies (SPSS) program to get the results of the study that were presented and analyzed in this chapter. In addition, the chapter contain the findings of focus groups discussion with mothers and students, and including the discussion and the triangulation between quantitative and qualitative results.

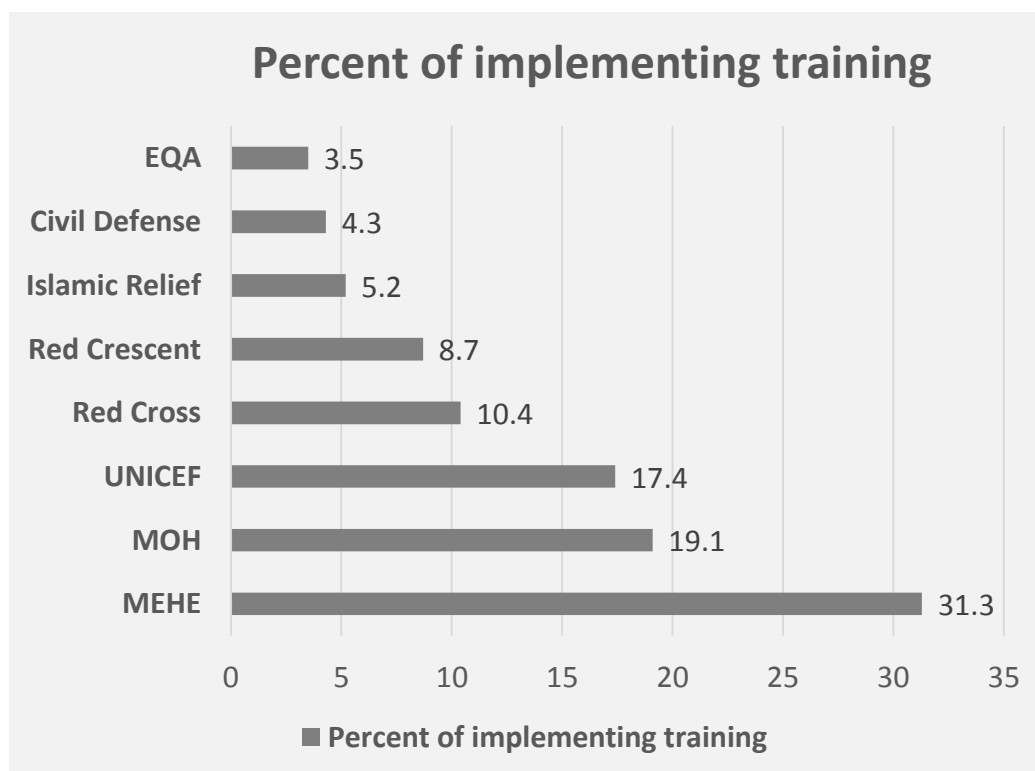
#### **4.1 Results of Demographic Data**

The results showed in table 4.1, indicate that out the total SHC in five areas, 22.3% were from North of Gaza, 26.5% were from the Gaza, 18.8% were from the Middle area, 12.4% were from Khan Younes and 20% were from Rafah. The data emphasizes that 58.2% of the participants were females and 41.8% of them were males. The results show about the age of participants that 51.2% aged 30 years to less than 39 years, 25.3% aged 40 to less than 49 years, 14.1% aged 50 years or more and 9.4% aged 20-29 years. Table 4.2 also shows that 10% of the participants have years of experience from 1-5 years, 45.9% from 6-10 years, 28.8% from 11-15 years, 8.2% of the 16 - less than 20 years and 7.1% of the 20 years and over. The results about the training question indicate that 67.6% of the participant received training about public health practices, while 32.4% not receive training.

**Table 4.1: Distribution of School Health Coordinators by Demographic Variables**

Variables		Frequency	Percentage
<b>Gender</b>	Male	71	41.8
	Female	99	58.2
<b>Directorate</b>	Gaza	44	26.5
	North Gaza	39	22.3
	Middle area	32	18.8
	Khan Younes	21	12.4
	Rafah	34	20
<b>Age</b>	20-29	16	9.4
	30-39	87	51.2
	40-49	43	25.3
	More than 49	24	14.1
<b>Training</b>	Yes	115	67.6
	No	55	32.4
<b>Years of Experience</b>	1-5 years	17	10
	6-10 years	78	45.9
	11-15 years	49	28.8
	15-20 years	14	8.2
	More than 20	12	7.1

**4.2 Training of school health coordinators about public health practices:**



**Figure 4.1: The institutions, which was responsible on training courses**

As mentioned in the table 4.1, the results about the training question indicate that 115 of the participant equal 67.6% received training about public health practices, 91 out of them, equal 79.1% when they asked about training, it was beneficial or not? They answered "Yes". While 24 equal 20.9% answered "No". figure (4.1) show the institutions which was responsible on training courses, it is clear that MEHE at the first rank with percent 31.3%, MOH in the second rank with 19.1% and UNICEF in the third place with 17.4%.

Table 4.2 indicated the number of training course hours and it's percent, it is clear that training courses which ranging less than ten hours, is the highest range with 34.7%.

**Table 4.2: The range and percentage of training course hours:**

<b>Training Hours</b>	<b>Frequency</b>	<b>Percent</b>
1-10 Hours	40	34.7%
11-20 Hours	24	20.8%
21-30 Hours	26	22.8%
More than 30 hours	25	21.7%
<b>Total</b>	<b>115</b>	<b>100 %</b>

The results show that there are many institutions apply training courses about promoting public health practices. Nevertheless, MEHE should have more attention on the usefulness of training; maybe training hours should be increased to achieve training goals.

#### **4.3 The role of schools in promoting public health practices in the four axes (Environment, Hygiene, nutrition and Health education):**

Through a table 4.3, it is clear that, the overall mean of the axes of the role of schools in promoting public health practices, equal (3.94 degree). The mean of this statement was

higher than the degree of neutrality (3), thus this means that SHCs agreed that there is a role for schools in promoting public health practices in the four axes. And it is clear that the relative weight of the total of the four axes is 78.90%, while the sub-areas axis (Nutrition) occupied the first rank with a relative weight reached 81.36%, the researcher attribute this as a result of attention of schools in school nutrition especially school canteen, which may affect student's health. The axis (Hygiene) occupied the second rank with relative weight 79.54%, and the mean equal 3.98. The axis (Health Education) occupied the third rank with relative weight 77.87%, and the mean equal 3.89. While the axis (Environment) occupied the last rank with relative weight 77.37%, this means the schools may focus on environmental aspects, but their roles are not enough, as it is needed. This result is inconsistent with the result of Al-Gergawi & Aga (2010) study, which found that the schools were interested in school environment as the first priority with relative weight 91.46%.

**Table 4.3: The role of schools in promoting public health practices in the four axes:**

#	Axes	Mean	Std. Deviation	relative weight	T .test	p- value
1	Environment	3.87	0.58	77.37	18.43	0.000
2	Hygiene	3.98	0.61	79.54	19.81	0.000
3	Nutrition	4.07	0.53	81.36	24.82	0.000
4	Health Education	3.89	0.51	77.87	21.81	0.000
<b>The total of the four axes</b>		3.94	0.49	78.90	24.08	0.000

This study consistent with AL-Qarny (2007) study who found that the degree of the role of SM in achieving the goals of health education in elementary school children of AL-Taif City schools with average as a whole is (3.39). The role of SM in securing good environment suitable for good nutrition for elementary school of high degree in all items of this axis is (3.89). The role of SM in achieving hygiene was high in most of the items of this axis with (3.56). Nevertheless, there is inconsistent with the result of health education axis; the mean was low average with (2.51).

#### **4.4 The role of schools in promoting environmental health practices:**

One sample t-test was used in the following tables to test if the opinions of the respondents about the content of the sentences are positive (Relative weight greater than "60%" and the p-value less than 0.05) or neutral (p-value is greater than 0.05 or negative (Relative weight less than "60%" and the p-value less than 0.05).

Based on the results presented in table 4.4 it point up that the study sample agree that there is role for schools in promoting environmental health practices with relative weight 77.37%.

A similar study carried out in Gaza strip, aimed to exploring the situation of health education application in governmental schools in Gaza city, the researcher applied questionnaire as a tool for this study on 50 SHCs in governmental schools; found that the school monitoring school environment carefully with relative weight 91.46% (AL-Gergawi & Aga, 2010).

SHCs agree that all statements in health education axis were from the role of school; especially it is clear that the statement number (1) which said, "The school gets rid of trash in a healthy way to prevent the spread of diseases." Came the first rank with relative weight 82.34% and mean equal (4.12 degree), the mean of this statement was higher than the degree of neutrality (3), this indicates that the SHCs were strongly agreed that " The school gets rid of trash in a healthy way to prevent the spread of diseases." The researcher attributes this result to school cooperation with municipalities to get rid of trash, and to save the environment of schools.

Moreover, statement number (5) which said that" The school is keen to educate students about how to preserve the environment. "Prioritized in the second rank place with relative weight 82.08% and mean equals (4.10 degree). Accordingly, the mean of this statement was more than the degree of neutrality (3), this shows that SHCs were strongly agreed, "The school is keen to educate students about how to preserve the environment." The researcher attributes this result to the curriculum that contain some lessons about environment, and the school environment is one of the foundations of education process.

Statement (3) which said, "Environmental Club in school is activated." Came at the last rank with relative weight 69.87% and mean equal (3.49 degree), the mean of this statement was higher than the degree of neutrality (3), this indicates that the SHCs were agreed that " Environmental Club in school is activated. ."But environmental club in the school need more attention to be activated, the researcher attributes this result to that there is no enough free

time for the teacher who is responsible for environmental club to activate it. Also, Statement (7) which said, "The school campaigns planting seedlings with the participation of students." Came at the last place with relative weight 74.64% and mean equal (3.73 degree), the mean of this statement was higher than the degree of neutrality (3), this indicates that the SHCs were agreed that " The school campaigns planting seedlings with the participation of students.", but the school should activated the participation of students in campaigns planting seedlings. The researcher attributes this result to the planting seedlings that need time and schools are keen on classroom activities more than the activities outside classroom.

**Table 4.4: The role of schools in promoting environmental health practices**

#	Paragraphs	Mean	Std. Deviation	relative weight	T .test	p-value
1	The school gets rid of trash in a healthy way to prevent the spread of diseases.	4.12	0.91	82.34	15.16	0.000
2	The school's administration is interested in the environment surrounding the school.	3.97	0.89	79.48	13.56	0.000
3	Environmental Club in school is activated.	3.49	1.04	69.87	5.87	0.000
4	The school does events related to the environment.	3.94	0.87	78.81	13.23	0.000
5	The school is keen to educate students about how to preserve the environment.	4.10	0.63	82.08	21.81	0.000
6	The school curriculum promotes environmental information.	3.79	0.82	75.79	11.89	0.000
7	The school campaigns planting seedlings with the participation of students.	3.73	0.95	74.64	9.50	0.000
8	The school reinforces student's practices that preserve the environment	4.08	0.73	81.60	18.16	0.000
<b>Total</b>		3.87	0.58	77.37	18.43	0.000

#### **4.5 The role of schools in promoting hygiene practices:**

Table 4.5 indicated that SHCs agree that there is role for schools in promoting hygiene practices with relative weight 79.54%. In addition, SHCs agree that all statements in hygiene axis were from the role of school. It is clear that the statement number (6) which said, "The school provides a waste paper basket inside each class." Came the first rank with relative weight 85.79% and mean equal (4.29 degree), the mean of this statement was higher than the degree of neutrality (3), this indicates that the SHCs were strongly agreed that " The school provides a waste paper basket inside each class.". The researcher attributes this result to the importance of provision a waste paper basket to keep the beautiful appearance in the classroom.

Moreover, statement number (5) which said," The school takes care about the cleanliness of the classrooms and yards." The Prioritized in second place with relative weight 85.70% and mean equals (4.28 degree). Accordingly, the mean of this statement was more than the degree of neutrality (3); this shows that SHCs were strongly agreed, "The school takes care about the cleanliness of the classrooms and yards." The researcher attributes this result to the cleanliness of the classrooms and yards that reflects at which degree SM do its roles and duties.

Statement (4) which said, "The hand-washing basins suits the number of school students." Came the last rank with relative weight 68.57% and mean equal (3.43 degree), the mean of this statement was higher than the degree of neutrality (3), this indicates that the SHCs were agreed that " The hand-washing basins suits the number of school students.", but the number of hand-washing suits should be elevated to suits the number of school students. The researcher attributes this result to the huge numbers of students inside schools; because schools were not built according to the numbers of students. Also, Statement (14) which said, "The school is keen on providing soap for students constantly." Came at the last place with relative weight 74.04% and mean equal (3.70 degree), the mean of this statement was higher than the degree of neutrality (3), this indicates that the SHCs were agreed that " The school is keen on providing soaps for students constantly.", but the schools need more attention in providing soap for students constantly. From the experience of the researcher in school health, he attributes this result to the students' wrong practices against soaps and the shortage in soaps supply from MEHE.

This results is consistent with the result of Hygan, (2005) study which aimed to the effectiveness of educational administration in the development of school health environment of the two-stage secondary and middle schools as perceived by managers and mentors, educators, doctors and school health unit in Mecca city. The researcher has designed a questionnaire was distributed to a sample consisting of 143 people study distributed as follows: 70 education educators, 58 school principals and 15- doctors in health unit in Makah City. The results as follow, the role of maintenance department in governmental schools not enough, there is shortage in detergents and disinfectants, and the numbers of clean workers is not enough in the schools.

#### **4.6 The role of schools in promoting nutritional health practices:**

Table (4.6) demonstrates that SHCs agree that there is a role for schools in promoting nutritional health practices with relative weight 81.36%. SHCs agree that all statements in nutritional health practices axis were from the role of school, especially statement number (6) which said, "The school observes constantly the cleanliness of the canteen." Came the first rank with relative weight 88.76% and mean equal (4.44 degree), the mean of this statement was higher than the degree of neutrality (3), this indicates that the SHCs were strongly agreed that " The school observes constantly the cleanliness of the canteen.". The researcher attributes this result to school's principals and SHCs know the importance of canteen's cleanliness in saving the students health; they also know the seriousness of diseases that could be caused. In addition to, statement number (7) which said," The school is interested in the cleanliness of food and drinks offered to the students." Prioritized in the second place with relative weight 84.68% and mean equals (4.23 degree). Accordingly, the mean of this statement was more than the degree of neutrality (3); this shows that SHCs were strongly agreed, "The school is interested in the cleanliness of food and drinks offered to the students". The researcher attributes this result to the cooperation between MEHE and MOH in monitoring the food offered in school canteen. This result is consistent with the result of Al-Gergawi & Aga (2010) study, which found that the schools are interested in the cleanliness of food and drinks offered to the students with relative weight 99.3%.

Statement (4) which said, "The school educates the students about the seriousness of obesity on human life." Came the last rank with relative weight 77.53% and mean equal (3.88 degree), the mean of this statement was higher than the degree of neutrality (3), this indicates that the SHCs were agreed that " The school educates the students about the seriousness of obesity on human life." Nevertheless, the school should be more attention for educates the students about the seriousness of obesity on their life. The researcher attributes this result to lack of brochures and educating meetings that can educate students about the seriousness of obesity on human life. In addition to statement (10) which said, "The school is interested in educating the students about the importance of drinking water constantly." Came at the last place with relative weight 77.78% and mean equal (3.89 degree), the mean of this statement was higher than the degree of neutrality (3), this indicates that the SHCs were agreed that " The school is interested in educating the students about the importance of drinking water constantly." However, the schools need more attention in educating the students about the importance of drinking water constantly. The researcher attributes this result to that knowledge and practices change of students about the drinking water constantly need cooperative between school and caregivers.

#### **4.7 The role of schools in promoting health education:**

The results in Table (4.7) show that SHCs agree that there is role for schools in promoting health education with relative weight 77.87%. A similar study carried out in Gaza strip, aimed to exploring the situation of health education application in governmental schools in Gaza city, the researcher applied questionnaire as a tool for this study on 50 SHCs in governmental schools; found that the there is a role for schools in health education with relative weight 85.04% (AL-Gergawi & Aga, 2010).

**Table 4.5: The role of schools in promoting hygiene practices:**

#	Paragraphs	Mean	Std. Deviation	relative weight	T .test	p-value
1	The school cares about the cleanliness of the health units constantly (Bathrooms).	4.18	0.85	83.66	17.29	0.000
2	The school has periodical maintenance of the health units (Bathrooms).	3.90	0.87	78.05	12.89	0.000
3	The school takes care about the cleanliness of the hand washing basins.	3.95	0.85	79.08	13.96	0.000
4	The hand-washing basins suits the number of school students.	3.43	1.13	68.57	4.70	0.000
5	The school takes care about the cleanliness of the classrooms and squares (yards).	4.28	0.87	85.70	18.05	0.000
6	The school provides a waste paper basket inside each class.	4.29	1.01	85.79	15.78	0.000
7	The school makes the students be aware of the importance of bathing.	4.01	0.87	80.26	14.28	0.000
8	The school follows up the cleanliness of students from outside.	4.25	0.74	85.00	20.85	0.000
9	The school makes the students be aware of the importance of cleanliness of mouth and teeth.	3.94	0.85	78.83	13.75	0.000
10	The school makes the students be aware of the importance of washing hands with soap and water.	4.18	0.75	83.53	19.32	0.000
11	The school celebrates World Day for washing hands with soap and water.	4.16	0.85	83.27	16.85	0.000
12	The school clarifies the students the times when they have to wash their hands.	3.95	0.84	79.08	13.99	0.000
13	The school makes the students be aware of the importance of switching underwear daily.	3.96	0.91	79.22	13.07	0.000
14	The school is keen on providing soaps for students constantly.	3.70	1.02	74.04	8.42	0.000
<b>Total</b>		3.98	0.61	79.54	19.81	0.000

**Table 4.6: The role of schools in promoting nutritional health practices:**

#	Paragraphs	Mean	Std. Deviation	relative weight	T .test	P-value
1	The school shows the students the descriptions of healthy food.	4.03	0.71	80.52	17.96	0.000
2	The school shows the students the importance of the basic food components for the body.	4.05	0.63	80.91	20.60	0.000
3	The school exploits the school broadcasting in educating students about nutrition.	4.17	0.71	83.40	20.52	0.000
4	The school educates the students about the seriousness of obesity on human life.	3.88	0.73	77.53	14.98	0.000
5	The school makes the students be aware of the diseases resulted from malnutrition.	4.05	0.61	80.92	21.18	0.000
6	The school observes constantly the cleanliness of the canteen.	4.44	0.66	88.76	27.06	0.000
7	The school is interested in the cleanliness of food and drinks offered to the students.	4.23	0.73	84.68	20.97	0.000
8	The school monitors the diversity of the meals provided to students in the canteen.	4.08	0.82	81.60	16.22	0.000
9	The school makes the students be aware of the importance of basic nutrition meals.	4.01	0.70	80.13	17.84	0.000
10	The school is interested in educating the students about the importance of drinking water constantly.	3.89	0.84	77.78	13.10	0.000
11	The school makes the students be aware of the importance of eating vegetables and fruit.	4.18	2.44	83.51	5.99	0.000
<b>Total</b>		4.07	0.53	81.36	24.82	0.000

SHCs agree that all statements in health education axis were from the role of school, especially statement number (1) which said, " In the school, there is health committee concerning with educating the students in health aspects." Which came at the first rank with relative weight 87.40% and mean equal (4.37 degree), the mean of this statement was higher than the degree of neutrality (3), this indicates that the SHCs were strongly agreed that " In the school, there is health committee concerning with educating the students in health aspects.". The researcher attributes this result to, MEHE that directs SM at the beginning of

each academic year to form health committee with participation of students. Also statement number (2) which said, "The school broadcasting is activated in spreading health awareness among students." Prioritized in the second place with relative weight 86.54% and mean equals (4.33 degree). Accordingly, the mean of this statement was more than the degree of neutrality (3); this shows that SHCs were strongly agreed, "The school broadcasting is activated in spreading health awareness among students." The researcher attributes this result to; for every committee and class in governmental schools, there is one day in the month to use broadcasting for achieving the goals and sending specific messages.

In the other hand, statement number (15) which said, "The school guides the students and staff to Web sites related to health." Came the last rank with relative weight 70.13% and mean equal (3.51 degree), the mean of this statement was higher than the degree of neutrality (3), this indicates that the SHCs were agreed that "The school guides the students and staff to Web sites related to health." However, the school should be more attention for guiding the students and staff to Web sites related to health. The researcher attribute this result to; using Web sites need training the SHCs how to use it, and need efforts of school health department to directs schools for specific health Web sites which is suitable for the age of students. In addition to statement (11) which said, "The school shows healthy educational films that fit the ages of the students." Came at the last place with relative weight 70.79% and mean equal (3.54 degree), the mean of this statement was higher than the degree of neutrality (3), this indicates that the SHCs were agreed that "The school shows healthy educational films that fit the ages of the students." However, the schools need more attention in showing healthy educational films. The researcher attribute this result to; the shortage of supplements like screens, LCDs that are necessary for presentations of health subjects.

#### **4.8 The relation between promotion of public health practices and the four axes (Environment, Hygiene, nutrition and Health education):**

There is a positive significant correlation at a level ( $\alpha \leq 0.05$ ) among the role of school's in promoting public health practices in governmental schools - Gaza Strip and four axes (environment, hygiene, nutrition, health education). Table (4.8).

**Table 4.7: The role of schools in promoting health education:**

#	Paragraphs	Mean	Std. Deviation	relative weight	T .test	p-value
1	In the school, there is health committee concerning with educating the students in health aspects.	4.37	0.85	87.40	20.06	0.000
2	The school broadcasting is activated in spreading health awareness among students.	4.33	0.79	86.54	20.69	0.000
3	The school organizes visits to some of the relevant authorities to public health.	3.84	0.85	76.75	12.21	0.000
4	The school organizes meetings with parents of students to discuss health matters.	3.94	0.73	78.83	15.91	0.000
5	The school works on a brochure related to public health of the students.	3.88	0.78	77.65	14.04	0.000
6	The school prepares wall banners, which aim to raise awareness about the health aspects.	4.15	0.67	82.99	21.15	0.000
7	The school holds health-training courses in collaboration with related parties.	3.88	0.77	77.50	13.92	0.000
8	The school provides library with publications belonging to the school health.	3.62	0.82	72.34	9.36	0.000
9	The teachers receive training on health aspects in school.	3.77	0.88	75.32	10.76	0.000
10	The school specializes some classes in health seminars.	3.92	0.84	78.44	13.68	0.000
11	The school shows healthy educational films that fit the ages of the students.	3.54	1.05	70.79	6.35	0.000
12	The students are trained on aspects of health and safety at school.	3.90	0.76	77.91	14.53	0.000
13	The School Health Coordinator receives a training program on health education.	3.97	0.81	79.48	14.86	0.000
14	The school directs the teachers to connect the school health with curriculum topics.	3.92	0.81	78.30	13.96	0.000
15	The school guides the students and staff to Web sites related to health.	3.51	0.99	70.13	6.34	0.000
16	The school holds courses in first aid.	3.94	0.91	78.82	12.76	0.000
17	The school holds plays, which aim to the prevention of some diseases.	3.88	0.83	77.63	13.10	0.000
18	The school encourages the students to participate in visiting sick colleagues.	3.96	0.79	79.22	15.07	0.000
19	The school is keen on giving the student his right to share sport classes.	4.00	0.80	80.00	15.40	0.000
20	The school educates the students about the importance of practicing exercise daily.	4.03	0.76	80.65	16.71	0.000
21	The school makes the students be aware of the dangers resulting from smoking.	3.83	0.95	76.60	10.79	0.000
22	The school shows the students the risks of sitting for long hours in front of the TV screen.	3.85	0.85	76.99	12.38	0.000
23	The school warns the students from abusing drugs without a prescription.	3.96	0.90	79.22	13.28	0.000
<b>Total</b>		3.89	0.51	77.87	21.81	0.000

### **4.8.1 School Environment**

Table 4.8 show that the correlation coefficient between the school's role in promoting public health practices in the governmental schools and the environment axis equal 0.788, and the probability value (Sig.) equals 0.00, which is lower than the significance level  $0.05 \geq \alpha$ , and this indicates the presence of a strong significant relationship.

Many studies have stated the results of interventions to reduce infection through improvements in drinking water, sanitation facilities, and hygiene practices in developing countries (Fewtrell et al., 2005). School environment influences personal hygiene and student's health.

### **4.8.2 Hygiene**

Table 4.8 also show that the correlation coefficient between the school's role in promoting public health practices in the governmental schools and the hygiene axis equal 0.903, and the probability value (Sig.) equals 0.00, which is lower than the significance level  $0.05 \geq \alpha$ , and this indicates the presence of a strong significant relationship.

Students should be thought about the importance of personal hygiene and hand washing from as early as the basis stage. In Gaza, the hygiene and sanitation taught at least once a month but more often once a weak (UNICEF, 2012/1).

Poor knowledge, attitudes and practice of personal hygiene such as hand washing play major roles in the high incidence of communicable diseases and therefore has negative consequences for child's long term overall development (Oyibo, 2012). Hygiene practices are heavily influenced by knowledge and attitudes towards hygiene (Vivas, 2010). There is a critical need to enhance a more scientific-based attitude to personal and domestic hygiene in schools and colleges if unhealthy practices are to be eliminated (IFH, 2002).

### **4.8.3 Nutrition**

Table 4.8 show that the correlation coefficient between the school's role in promoting public health practices in the governmental schools and the nutrition equals 0.856 axis, the

probability value (Sig.) equals 0.00, which is lower than the significance level  $0.05 \geq \alpha$ , and this indicates the presence of a strong significant relationship.

#### 4.8.4 Health Education

Finally, the results show that the correlation coefficient between the school's role in promoting public health practices in the governmental schools and the health education axis, equal 0.925, and the probability value (Sig.) equals 0.00, which is lower than the significance level  $0.05 \geq \alpha$ , and this indicates the presence of a strong significant relationship.

**Table 4.8: The relation between promotion of public health practices and the four axes:**

Axes	Pearson correlation coefficient	p- value
<b>Environment</b>	*0.788	0.000
<b>Hygiene</b>	*0.903	0.000
<b>Nutrition</b>	*0.856.	0.000
<b>Health Education</b>	*0.925	0.000

### 4.9 Socio-demographic

#### 4.9.1 The role of schools in promoting public health practices related to gender

Table 4.9 show that according to t-test that there are significant differences between (the total of the four axes in promoting public health practices) and the gender variable, and there are significant differences in favor of females, where the significance level was 0.022 which is less than the value of 0.05 ( $0.05 \geq \alpha$ ). Which means female schools promoting public health practices more than male schools. These findings are consistent with the findings of Soumya et al. (2010), who observed that the general status of personal hygiene was better among girls as compared to boys in South Kolkata schools. Add study in Thiruchengode of oral health related KAP found those girls' practice was better than boys practice (Arun et al., 2010). In Texas, the girl's students had higher rate of hand hygiene practice (59%) than the

males (32%). (Anderson, et al., 2008). The differences between girls and boys schools in promoting public health practices can be attributed to a higher concern regarding personal health practices among girls.

**Table 4.9: Differences in the role of schools in promoting public health practices related to gender:**

Axes	Sex	N	Mean	Std. Deviation	t- test	p-value	P-value
Environment	Male	71	3.74	5.56	-2.22	0.027	Sig.
	Female	99	3.96	3.83			
Hygiene	Male	71	3.81	10.26	-2.89	0.004	Sig.
	Female	99	4.09	6.77			
Nutrition	Male	71	3.97	7.55	-1.83	0.069	Not sig.
	Female	99	4.13	4.26			
Health Education	Male	71	3.82	14.16	-1.48	0.140	Not sig.
	Female	99	3.94	9.53			
The total of four axes	Male	71	3.84	33.58	-2.23	0.022	sig.
	Female	99	4.02	21.06			

**4.9.2 The role of schools in promoting public health practices related to receive specific training, age groups, and years of experience variables**

according to t-test and ANOVA test there are no significant differences between (the total of the four axes in promoting public health practices) and receive specific training, age groups, and years of experience variables, the significance level was greater than the value of 0.05 ( $0.05 \geq \alpha$ ).

**4.9.3 The role of schools in promoting public health practices related to directorate of education**

Table 4.10 show that according to ANOVA test that there are significant differences between the four axes in promoting public health practices and the directorate variable, and there are

significant differences in favor of directorate of education in Gaza, followed by North Gaza where the significance level was 0.006 which is less than the value of 0.05 ( $0.05 \geq \alpha$ ). This meant that directorate of education in Gaza promoting public health practices more than others directorates do. In Gaza governorate, the student's appearance checklist found that there are differences in regards to the personal hygiene appearance between West Gaza and East Gaza in favor of West Gaza directorate of education (El-Zobeidi, 2014). Factors that may explain the differences in promoting public health schools according to the directorates of education in Gaza strip might be attributed to the differences in economic status, water resources, life style, number of family members, knowledge and attitude about public health practices.

**Table 4.10: Differences in the role of schools in promoting public health practices related to the directorate**

Directorate		N	Mean	Std. Deviation	ANOVA	p-value	
<b>Environment</b>	Gaza	44	4.11	4.04	2.720	0.032	Sig.
	North Gaza	39	3.90	4.57			
	Middle area	32	3.88	4.47			
	Khan Younes	21	3.78	4.34			
	Rafah	34	3.66	5.32			
<b>Hygiene</b>	Gaza	44	4.28	6.03	4.220	0.003	Sig.
	North Gaza	39	4.14	6.49			
	Middle area	32	3.93	8.91			
	Khan Younes	21	3.97	8.76			
	Rafah	34	3.71	9.06			
<b>Nutrition</b>	Gaza	44	4.27	4.03	3.044	0.019	Sig.
	North Gaza	39	4.06	4.46			
	Middle area	32	4.01	5.66			
	Khan Younes	21	4.23	6.39			
	Rafah	34	3.87	7.07			
<b>Health Education</b>	Gaza	44	4.11	9.42	2.853	0.026	Sig.
	North Gaza	39	3.92	12.96			
	Middle area	32	3.79	11.31			
	Khan Younes	21	4.01	11.49			
	Rafah	34	3.77	12.63			
<b>The total of four axes</b>	Gaza	44	4.18	20.73	3.737	0.006	Sig.
	North Gaza	39	4.00	24.15			
	Middle area	32	3.88	26.93			
	Khan Younes	21	4.01	25.03			
	Rafah	34	3.76	31.25			

## 4.10 Focus Groups Results

### Background:

This part summarizes the results of focus groups, which conducted as part of the role of schools in promoting public health practices in governmental schools-Gaza strip study. Findings are based on focus groups were conducted with caregivers (mainly the mothers) in the directorates of education in north and east Gaza with total of twenty mothers in addition to students in the age group fifteen and sixteen years old that represent grades nine and ten with total twenty students. Ten mothers and ten students participated in two focus groups from Amouas High Basic School for girls in North Gaza. Also, ten mothers and ten students participated in two focus groups from Al-Bader High Basic School for girls in East Gaza. Focus groups explored mothers and students perspective about the role of schools in promoting public health practices.

### 4.10.1 Students focus groups results

The students participated in the focus groups, reported that they have the conceptual knowledge about public health practices. They mentioned that the most important healthy practices are no throwing rubbish in the street, no smoking, and washing hands. The students noticed that the most important sources of information about public health practices were family and school. About thirteen students remembered that they participated in health education meetings inside school, and it was effect on their public health practices. One students say, *"I like to hear advices about my health and i consider healthy information is important"*. Fourteen students mentioned that, they apply some of public health practices in their life, these practices taught for students inside school like washing hands with water and soap, brushing teeth, cleaning hair, and cutting nails. Finally, the participated students agreed that there is many barriers face him inside school and prevent public health practices, like facilities barriers, lake of soaps and cleaning materials, unhealthy seats, and school canteen not provide various types of nutrition. One student complained, he said, *"schools bathrooms are dirty; it is not like my house's bathroom, so that I don't like to enter it "*. This result is consistent with the result of EL-Zobeidi (2014) result, when the interviewed teachers

explained that schools are clean but coming to toilets, they underlined that toilets are not clean enough due to misuse by students. And this result consistent with the result of UNICEF (2012) Kap survey which asserted that, nearly half of students in both West bank and GS refuse to use school toilets and the main reason given by students surveyed is that toilets are dirty and smelly.

It is clear that, there is consistency between the results of focus groups that carried out with the students and the results of quantitative tool, especially on the subject of cleanliness within the school and specifically about the cleanliness of the bathrooms, as well as it became clear that school canteens need more diversity in food.

#### **4.10.2 Mother's focus groups results**

Mothers are careful about public health practices since it has a strong relation with their son's health. Ten mothers remembered that they participated in health education meetings inside school, about the role of the home in promoting public health practices, one mother said, "*School only isn't enough for having knowledge and practices about health. So, mothers have to participate and cooperate with school, they can ask their sons what they are taught and help them to practice healthy practices.*"

Another mother said, "*I always tells my husband to save soap, toothbrush and toothpaste for my sons. But, sometimes the economic status prevents availability health facilities at home.*" Fifteen mothers remembered some situations, which their sons learnt in school, such as brushing teeth, washing hands. However, one mother said. "*These practices happened with my son when he was at the primary stage and not after that.*" This confirms SHCs opinions about curriculum, one of them write "MEHE is not interested in the health curriculum for preparatory and secondary stages, it was considered as optional curriculum not compulsory, so there is no effect on students' public health practices. This result inconsistent with the result of Saher (2012) study, which indicated that topics and issues that are related to the individual, family and community health can be addressed through the school curriculum to be clarified, and face it in ways that reduce or limit its severity.

About health nutritional practices, fifteen mothers agreed that their children did not like to have breakfast meal before going to the school, so it must be a nutritional program in the school, one mother remembered and said "*my children liked school when there was a food*

*program, and his health become different towards the best, unfortunately this program stopped" .*

Finally, mothers noticed that, the school care about student's health. Nevertheless, there are many obstacles face them inside school. A mother said, "My daughter complained that bathrooms aren't clean, there is no soap, and sometimes no water inside it". This result is consistent with the result of Al-Gergawi & Aga (2010) study, which found that the schools interested in the cleanliness of toilets with relative weight 69.77%.

#### **4.11 Cross tabulation and triangulation between the main findings of Qualitative and Quantitative Analysis**

After the combination between the responses of SHCs in the self-reported questionnaire, student's focus group discussion, and mother's focus group discussion, the results show that the responses highly agree that there is a role for schools in promoting public health practices. These results were consistent with the group's discussion results. Nevertheless, the results pointing to some obstacles facing the implementation of this role, like difficult economic situation, which affects the availability of the necessary tools for the application of these practices within the school or at home.

Results of the questionnaire, addressed that the (Nutrition) axis was occupied the first rank, with a relative weight reached 81.36%. These results were inconsistent with the mothers' indications, as they agreed that their children did not like to have breakfast meal before going to the school, so it must be a nutritional program in the school. In addition to this results inconsistent with the student's indication, as they agreed that school canteen not provide various types of food.

The axis (Hygiene) occupied the second rank with relative weight 79.54%. This result was to some extent consistent with the students indications, especially when one students complained, he said, *"schools bathrooms are dirty; it is not like my house's bathroom, so that I don't like to enter it "*. In addition to, this result consistent with the mothers, one mother said, *"My daughter complained that bathrooms aren't clean, there is no soap, and sometimes no water inside it"*.

The item "In the school, there is health committee concerning with educating the students in health aspects", came at the first rank in health education axis, the researcher see this may because from the system of schools which run by MEHE it should be health committee in each school. This result consistent with students, whom agree that they participated in health education meetings inside school.

It is clear that there is consistency between the results of focus groups that carried out with the mothers and the results of quantitative tool. On the subject of nutrition, it should be more efforts to provide food program in governmental schools because it has a significant impact in improving the health status of the students.

Some of SHCs answer the open question in the questionnaire that to improve school health, schools should offer hygiene tools, *especially soaps, trash baskets, brooms, scrapers, clipping nails*. From the experience of the researcher in school health, MEHE offers hygiene tools for schools at the beginning of the academic year, but it is not enough, so one of the role of school's management is purchase school's need especially hygiene tools.

## Chapter Five

### 5 Conclusion and Recommendations

#### 5.1 Conclusion

The aim of this study is to know the role of schools in promoting public health practices in Governmental Schools - Gaza Strip. These study findings may help in promoting public health practices among school children in Gaza strip, which affecting school children health.

The total number of SHC who participated in this study was one hundred seventy in governmental schools-Gaza strip, 22.3% were from North Gaza, 26.5% were from Gaza, 18.8% were from Middle area, 12.4% were from Khan Younes and 20% were from Rafah. The data emphasizes that 58.2% of the participants were females and 41.8% of them were males. The results show about the age of participants that 51.2% aged 30 years to less than 39 years, 25.3% aged 40 to less than 49 years, 14.1% aged 50 years or more and 9.4% aged 20-29 years. Table 4.2 also show that 10% of the participants have years of experience from 1-5 years, 45.9% from 6-10 years, 28.8% from 11-15 years, 8.2% of the 16 - less than 20 years, 7.1% of the 20 years and over. The results about the training question indicate that 67.6% of the participant received training about public health practices, while 32.4% not receive training. The participants who received training about public health practices, 91 out of them, equal 79.1% when they asked about training, it was beneficial or not? They answered "Yes". While 24 equal 20.9% answered "No".

The relative weight of the total of the four axes (Environment, Hygiene, nutrition and Health education) is 78.90%, while the sub-areas was first axis (Nutrition) occupied the first rank with a relative weight reached 81.36%, the axis (Hygiene) occupied the second rank with relative weight 79.54%, and the mean equal 3.98. The axis (Health Education) occupied the third rank with relative weight 77.87%, and the mean equal 3.89. While the axis (Environment) occupied the last rank with relative weight 77.37%.

Study sample agree that there is role for schools in promoting environmental health practices with relative weight 77.37%. It is clear that the statement number (1) which said, "The school gets rid of trash in a healthy way to prevent the spread of diseases." Came the first rank with

relative weight 82.34% and mean equal (4.12 degree), while statement (3) which said, "Environmental Club in school is activated." Came at the last rank with relative weight 69.87% and mean equal (3.49 degree).

SHCs agree that there is role for schools in promoting hygiene practices with relative weight 79.54%. It is clear that the statement number (6) which said, "The school provides a waste paper basket inside each class." Came the first rank with relative weight 85.79% and mean equal (4.29 degree), while Statement (4) which said, "The hand-washing basins suits the number of school students." Came the last rank with relative weight 68.57% and mean equal (3.43 degree).

In addition, SHCs agree that there is role for schools in promoting nutritional health practices with relative weight 81.36%. It is clear that the statement number (6) which said, "The school observes constantly the cleanliness of the canteen." Came the first rank with relative weight 88.76% and mean equal (4.44 degree), while statement (4) which said, "The school educates the students about the seriousness of obesity on human life." Came the last rank with relative weight 77.53% and mean equal (3.88 degree).

Moreover, according to the results, there is role for schools in promoting health education with relative weight 77.87%. SHCs agree that all statements in health education axis were from the role of school, especially statement number (1) which said, " In the school, there is health committee concerning with educating the students in health aspects." Which came at the first rank with relative weight 87.40% and mean equal (4.37 degree), while statement number (15) which said, "The school guides the students and staff to Web sites related to health." Came the last rank with relative weight 70.13% and mean equal (3.51 degree)

There is a positive significant correlation at a level ( $\alpha \leq 0.05$ ) among the role of school's in promoting public health practices in governmental schools - Gaza Strip and four axes (environment, hygiene, nutrition, health education).

According to t-test that there are significant differences between (the total of the four axes in promoting public health practices) and the gender variable, and there are significant differences in favor of females, where the significance level was 0.022 which is less than the value of 0.05 ( $0.05 \geq \alpha$ ). Moreover, there are no significant differences between (the total of

the four axes in promoting public health practices) and receive specific training variable, the significance level was 0.466 which is greater than the value of 0.05 ( $0.05 \geq \alpha$ ).

While according to ANOVA test that there are no significant differences between (the total of the four axes in promoting public health practices) and years of experience variable, the significance level was 0.099 which is greater than the value of 0.05 ( $0.05 \geq \alpha$ ). ANOVA test also indicates that there are no significant differences between (the total of the four axes in promoting public health practices) and age groups variable, the significance level was 0.568 which is greater than the value of 0.05 ( $0.05 \geq \alpha$ ). But ANOVA test show that there are significant differences between (the total of the four axes in promoting public health practices) and the directorate variable, and there are significant differences in favor of Gaza directorate of education, followed by North Gaza where the significance level was 0.006 which is less than the value of 0.05 ( $0.05 \geq \alpha$ ).

The results observed that the toilets of schools are not acceptable by students to be use. May be due to insufficient and inadequate conditions of sanitation system in school's toilets.

It can be concluded that, students spend most of their time at school and home; this can clearly indicates that parents and teachers can be effective promoters for public health practices, through health education and by the communication between the school and homes such as parents-teacher meetings.

## **5.2 Recommendations**

This study provides information about the role of schools in promoting public health practices in governmental schools- Gaza strip. There are various recommendations that made based on the results of the study:

1. Regular follow up for personnel and public hygiene from both school and caregivers.
2. Schools need more health education meetings for students and caregivers.
3. Schools should offer the needs of hygiene tools, especially soaps, trash baskets, brooms, scrapers, clipping nails.
4. Health facilities and bathrooms need regular maintenance.

5. MEHE should be more attention in training SHCs, especially about promoting public health practices.
6. Environmental clubs in schools should be more activation.
7. Participation of students in campaigns planting seeding is important.
8. Students need to learn about the seriousness of obesity on human life, the importance of drinking water constantly, and road safety.
9. MEHE should seek the support of institutions especially on provide food program for students.
10. SM and school health committee should guides the students and staff to websites related to health.
11. Prepare public health practices manual as a guide for schools.

**Recommendations for further research:**

1. Assessment of promoting public health practices on UNRWA and Private schools.
2. Assessment of hygiene status in governmental schools.
3. Challenges of school health programme from students perspectives.
4. How public health practices might improve learning process.

## Chapter Six

### 6 References and Annexes

#### 6.1 References

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## 6.2 Annexes

(Annex 1)



# المجلس الفلسطيني للبحوث الصحي Palestinian Health Research Council

تعزيز النظام الصحي الفلسطيني من خلال مأسسة استخدام المعلومات البحثية في صنع القرار

Developing the Palestinian health system through institutionalizing the use of information in decision making

## Helsinki Committee For Ethical Approval

Date: 01/08/2016

Number: PHRC/HC/141/16

Name: ABDALLH N. NASSAR

الاسم: عبد الله نصر نصار

We would like to inform you that the committee had discussed the proposal of your study about:

نفيدكم علماً بأن اللجنة قد ناقشت مقترح دراستكم  
حول:

### The Role of Schools in Promoting Public Health Practices in Governmental Schools-Gaza Strip

The committee has decided to approve the above mentioned research. Approval number PHRC/HC/141/16 in its meeting on 01/08/2016

و قد قررت الموافقة على البحث المذكور عاليه  
بالرقم والتاريخ المذكوران عاليه

Signature

Member

Member

Chairman

#### Genral Conditions:-

1. Valid for 2 years from the date of approval.
2. It is necessary to notify the committee of any change in the approved study protocol.
3. The committee appreciates receiving a copy of your final research when completed.

#### Specific Conditions:-

E-Mail: pal.phrc@gmail.com

Gaza - Palestine

غزة - فلسطين  
شارع النصر - مفترق العيون

(Annex 2)

Al-Quds University  
Jerusalem  
School of Public Health



جامعة القدس  
القدس  
كلية الصحة العامة

التاريخ: 2016/8/21

حضرة الدكتور/ زياد ثابت حفظه الله  
عطوفة وكيل وزارة التربية والتعليم العالي

السلام عليكم ورحمة الله،،

الموضوع: مساعدة الطالب/ عبدالله نصار-وزارة التربية والتعليم

تحديكم أطيب التمنيات وتمنى لكم دوام التقدم والإزدهار. ونرجو تكرم سيادتكم بالعلم بأن الطالب المذكور أعلاه يقوم بإجراء بحث بعنوان:

**“The Role of Schools in Promoting Public Health Practices in Governmental Schools-the Gaza Strip”**

كمتطلب للحصول على درجة الماجستير في الصحة العامة-مسار إدارة صحية، وعليه نرجو التكرم بالموافقة والايجاز لمن يلزم بالسماح للطلاب بجمع البيانات الخاصة لبحثه، حيث تشمل عينة البحث منسقي الصحة المدرسية وعدد من الطلبة في المدارس الحكومية التابعة لوزارتكم الموقرة وأيضاً عدد من أولياء الأمور. علماً بأن المعلومات ستكون متوفرة لدى الباحث والجامعة فقط وستطلعكم على النتائج في حينها.

و اقبلوا فائق التحية و الاحترام،،،  
د. بسام أبو حمالة  
منسق عام برامج الصحة العامة  
فرع غزة

نسخة:

- الملف

Jerusalem Branch/Telefax 02-2799234  
Gaza Branch/Telefax 08-2644220-2644210  
P.O. box 51000 Jerusalem

فرع القدس / تلفاكس 02-2799234  
فرع غزة / تلفاكس 08-264420-2644210  
ص.ب. 51000 القدس

(Annex 3)

State of Palestine  
Ministry of Education & Higher Education  
General Directorate of Educational planning

دولة فلسطين  
وزارة التربية والتعليم العالي  
الإدارة العامة للتخطيط التربوي

الرقم: و.ت.غ. مذكرة داخلية ( )  
التاريخ: 2016/08/22  
الموافق: 19 ذو القعدة، 1437 هـ

22. 08. 2016  
المحترم  
رقم: 2965

السادة / مديري التربية والتعليم - محافظات غزة  
السلام عليكم ومرحمة الله وبركاته،،

**الموضوع / تسهيل مهمة بحث**

نهدىكم أطيب التحيات، ونتمنى لكم موفور الصحة والعافية، وبخصوص الموضوع أعلاه، يرجى تسهيل مهمة الباحث/ عبد الله ناصر محمد نصار والذي يجري بحثاً بعنوان :

**“The Role of Schools in Promoting Public Health Practices in Governmental Schools- the Gaza Strip”**

وذلك استكمالاً لمتطلبات الحصول على درجة الماجستير في كلية الصحة العامة جامعة القدس بغزة تخصص إدارة صحية، في تطبيق أدوات البحث على عينة من منسقي الصحة المدرسية وعدد من الطلبة بمديريتكم الموقرة، وذلك حسب الأصول.

ونفضلوا بقبول تأثرنا للاهتمام،،،

أ. رشيد محمد أبو جحوج  
نائب مدير عام التخطيط التربوي

السيد/ وكيل وزارة التربية والتعليم العالي  
السيد/ وكيل الوزارة المساعد للشؤون التعليمية  
السيد/ وكيل الوزارة المساعد للشؤون التعليمية العالي  
السيد/ مدير عام الصحة المدرسية  
الملف.

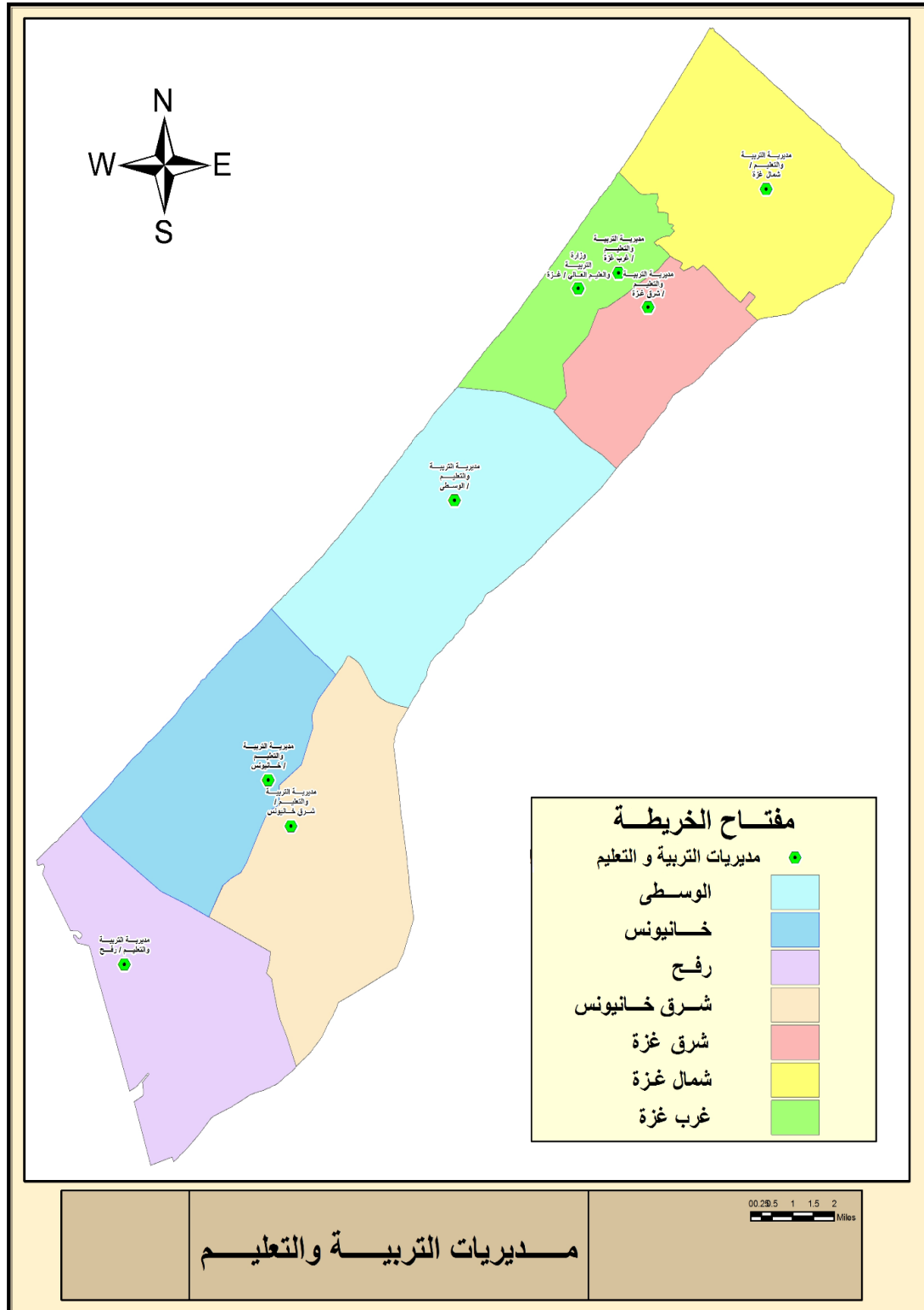
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المحترم.

دولة فلسطين  
وزارة التربية والتعليم العالي

غزة: (08-2641295 - 2641297) فاكس: (08-2641292) (08-2641292)  
Email: info@mohe.ps

(Annex 4)

Distribution of education directorates on Gaza Strip map



(MOEHE, 2012)

**(Annex 5)**

**School Health Coordinator Questionnaire Cover Page**

**The Role of Schools in Promoting Public Health Practices in Governmental Schools-  
Gaza Strip.**

**Dear teacher,**

1-This questionnaire, which is between your hands, aims to learn about the role of schools in promoting public health practices in public schools - the Gaza Strip.

2-Results will be limited to scientific research purposes only.

3-Please, read every statement carefully and then select only one answer you prefer, so I hope you to answer all the questions credibly and do not leave any of them without answer to achieve the objectives of the study.

4-When you choose the answer, check (✓) in the suitable field according to your opinion

The researcher

Abdullah Nasser Nassar

Master's student -Public Health



**PART II: This section aims to determine the role of schools in promoting public health practices:**

No.	The Item	Strongly disagree	Disagree	Average	Agree	Strongly agree
<b>The first domain: Environment</b>						
9	The school gets rid of trash in a healthy way to prevent the spread of diseases.					
10	The school's administration is interested in the environment surrounding the school.					
11	Environmental Club in school is activated.					
12	The school does events related to the environment.					
13	The school is keen to educate students about how to preserve the environment.					
14	The school curriculum promotes environmental information.					
15	The school campaigns planting seedlings with the participation of students.					
16	The school reinforces students' practices that preserve the environment.					
<b>The second domain: Hygiene</b>		Strongly disagree	Disagree	Average	Agree	Strongly agree
17	The school cares about the cleanliness of the health units constantly (Bathrooms).					
18	The school has periodical maintenance of the health units (Bathrooms).					
19	The school takes care about the cleanliness of the hand washing basins.					
20	The hand-washing basins suits the number of school students.					
21	The school takes care about the cleanliness of the classrooms and yards.					
22	The school provides a waste paper basket inside each class.					

23	The school makes the students be aware of the importance of bathing.					
24	The school follows up the cleanliness of students from outside.					
25	The school makes the students be aware of the importance of cleanliness of mouth and teeth.					
26	The school makes the students be aware of the importance of washing hands with soap and water.					
27	The school celebrates World Day for washing hands with soap and water.					
28	The school clarifies the students the times when they have to wash their hands.					
29	The school makes the students be aware of the importance of switching underwear daily.					
30	The school is keen on providing soap for students constantly.					
<b>The third domain: Nutrition</b>		<b>Strongly disagree</b>	<b>Disagree</b>	<b>Average</b>	<b>Agree</b>	<b>Strongly agree</b>
31	The school shows the students the descriptions of healthy food.					
32	The school shows the students the importance of the basic food components for the body.					
33	The school exploits the school broadcasting in educating students about nutrition.					
34	The school educates the students about the seriousness of obesity on human life.					
35	The school makes the students be aware of the diseases resulted from malnutrition.					
36	The school observes constantly the cleanliness of the canteen.					
37	The school is interested in the cleanliness of food and drinks offered to the students.					

38	The school monitors the diversity of the meals provided to students in the canteen.					
39	The school makes the students be aware of the importance of basic nutrition meals.					
40	The school is interested in educating the students about the importance of drinking water constantly.					
41	The school makes the students be aware of the importance of eating vegetables and fruit.					
<b>The fourth domain: Health Education</b>		<b>Strongly disagree</b>	<b>Disagree</b>	<b>Average</b>	<b>Agree</b>	<b>Strongly agree</b>
42	In the school, there is health committee concerning with educating the students in health aspects.					
43	The school broadcasting is activated in spreading health awareness among students.					
44	The school organizes visits to some of the relevant authorities to public health.					
45	The school organizes meetings with parents of students to discuss health matters.					
46	The school works on a brochure related to public health of the students.					
47	The school prepares wall banners, which aim to raise awareness about the health aspects.					
48	The school holds health-training courses in collaboration with related parties.					
49	The school provides library with publications belonging to the school health.					
50	The teachers receive training on health aspects in school.					
51	The school specializes some classes in health seminars.					
52	The school shows healthy educational films that fit the ages of the students.					

53	The students are trained on aspects of health and safety at school.					
54	The School Health Coordinator receives a training program on health education.					
55	The school directs the teachers to connect the school health with curriculum topics.					
56	The school guides the students and staff to Web sites related to health					
57	The school holds courses in first aid.					
58	The school holds plays, which aim to the prevention of some diseases.					
59	The school encourages the students to participate in visiting sick colleagues.					
60	The school is keen on giving the student his right to share sport classes.					
61	The school educates the students about the importance of practicing exercise daily.					
62	The school makes the students be aware of the dangers resulting from smoking.					
63	The school shows the students the risks of sitting for long hours in front of the TV screen.					
64	The school warns the students from abusing drugs without a prescription.					

اختبار للتعرف على دور المدارس في تعزيز ممارسات الصحة العامة في المدارس  
الحكومية -قطاع غزة

**The Role of Schools in Promoting Public Health Practices in  
Governmental Schools- Gaza Strip.**

عزيزي المعلم.....عزيزتي المعلمة

- 1- يهدف هذا المقياس الذي بين يديك للتعرف على دور المدارس في تعزيز ممارسات الصحة العامة في المدارس الحكومية -قطاع غزة.
- 2- سوف تقتصر النتائج لأغراض البحث العلمي فقط.
- 3- اقرأ/ي كل عبارة بعناية ثم حدد/ي معرفتك باختيارك اجابة واحدة فقط وهي التي تتراح/ي اليها وتفضلها، لذا أرجو الاجابة على جميع الأسئلة بمصادقية وعدم ترك أي منها دون الاجابة وذلك لتحقيق أهداف الدراسة.
- 4- عند اختيارك للإجابة ضع علامة صح (✓) في المكان المعبر عن رأيك.

الباحث

عبدالله ناصر نصار

طالب ماجستير صحة عامة

(استبيان منسق الصحة المدرسية)

الجزء الأول: معلومات أساسية عن المعلم

1	اسم المدرسة: .....			
2	المديرية: 1- غزة <input type="checkbox"/> 2- شمال غزة <input type="checkbox"/> 3- الوسطى <input type="checkbox"/> 4- خان يونس <input type="checkbox"/> 5- رفح <input type="checkbox"/>			
3	العمر بالسنوات: ..... 4 الجنس: 1- ذكر <input type="checkbox"/> 2- أنثى <input type="checkbox"/>			
5	عدد سنوات الخبرة: .....			
6	التخصص: .....			
7	هل تلقيت تدريباً حول الممارسات الصحية : 1- نعم <input type="checkbox"/> 2- لا <input type="checkbox"/>			
8	إذا كانت اجابتك (نعم) ، من فضلك أجب عن الأسئلة التالية:			
	عنوان التدريب	الجهة المنفذة	عدد ساعات التدريب	هل وصلت الفائدة

الجزء الثاني: يهدف هذا الجزء للتعرف على دور المدرسة في تعزيز ممارسات الصحة العامة:

م	البند				
المحور الأول: البيئة					
م	غير موافق بشدة	غير موافق	محايد	موافق	موافق بشدة
9					تتخلص المدرسة من القمامة بطريقة صحية تمنع انتشار الامراض
10					تهتم إدارة المدرسة بالبيئة في محيط المدرسة
11					النادي البيئي مفعّل في المدرسة
12					تفعل المدرسة المناسبات ذات العلاقة بالبيئة
13					تحرص المدرسة على تثقيف الطلبة حول كيفية الحفاظ على البيئة
14					المنهاج المدرسي يعزز المعلومات البيئية
15					تقوم المدرسة بحملات زراعة الأشجار بمشاركة الطلبة
16					المدرسة تعزز ممارسات الطلبة التي تحافظ على البيئة
المحور الثاني: النظافة					
م	غير موافق بشدة	غير موافق	محايد	موافق	موافق بشدة
17					تهتم المدرسة بنظافة الوحدات الصحية باستمرار (دورات المياه)
18					تقوم المدرسة بصيانة دورية لدورات المياه.
19					تهتم المدرسة بنظافة أحواض غسل الأيدي
20					تناسب أحواض غسل الأيدي مع عدد طلاب المدرسة
21					تهتم المدرسة بنظافة الفصول والمساحات
22					توفر المدرسة سلة للمهملات داخل كل فصل دراسي
23					توعي المدرسة الطلبة حول أهمية الاستحمام
24					تتابع المدرسة نظافة المظهر الخارجي للطلبة
25					توعي المدرسة الطلبة حول أهمية نظافة الفم والأسنان
26					توعي المدرسة الطلبة حول أهمية غسل الأيدي بالماء والصابون
27					تحتفل المدرسة باليوم العالمي لغسل الأيدي بالماء والصابون
28					توضح المدرسة للطلاب الأوقات الواجب فيها غسل الأيدي
29					توعي المدرسة الطلبة حول أهمية تبديل الملابس الداخلية يومياً
30					تحرص المدرسة على توفر الصابون للطلبة باستمرار
المحور الثالث: التغذية					
م	غير موافق بشدة	غير موافق	محايد	موافق	موافق بشدة
31					تبين المدرسة للطلاب مواصفات الغذاء السليم
32					تبين المدرسة للطلاب أهمية المواد الغذائية الجيدة للجسم
33					تستغل المدرسة الإذاعة المدرسية في تثقيف الطلبة حول التغذية
34					تثقف المدرسة الطلبة حول خطورة السمنة على حياة الانسان
35					المدرسة توعي الطلبة حول الأمراض الناتجة عن سوء التغذية
36					تتابع المدرسة نظافة المقصف المدرسي باستمرار

					37	تهتم المدرسة بنظافة الطعام والمشروبات المقدمة للطلبة
					38	تراقب المدرسة تنوع الوجبات الغذائية المقدمة للطلبة في المقصف
					39	توعي المدرسة الطلبة حول أهمية الوجبات الغذائية الأساسية
					40	تهتم المدرسة بتوعية الطلبة حول أهمية شرب الماء باستمرار
					41	توعي المدرسة الطلبة حول أهمية تناول الخضروات والفاكهة
موافق بشدة	موافق	محايد	غير موافق	غير موافق بشدة	المحور الرابع: التثقيف الصحي	
					42	يوجد في المدرسة لجنة صحية تهتم بتوعية الطلاب بالجوانب الصحية
					43	يتم تفعيل الإذاعة المدرسية في نشر الوعي الصحي بين الطلاب
					44	تنظم المدرسة زيارات لبعض الجهات ذات العلاقة بالصحة العامة
					45	تنظم المدرسة لقاءات مع أولياء أمور الطلاب لمناقشة أمور صحية
					46	تعمل المدرسة على إعداد مطوية تتعلق بالصحة العامة للطلاب
					47	تعد المدرسة لافتات جدارية تهدف للتوعية حول الجوانب الصحية
					48	تقيم المدرسة دورات تدريبية صحية بالتعاون مع جهات ذات علاقة
					49	تعمل المدرسة على تزويد المكتبة بمطبوعات تخص الصحة المدرسية
					50	يتلقى المعلمين تدريب يتعلق بالجوانب الصحية بالمدرسة
					51	تخصص المدرسة بعض الحصص لإقامة الندوات الصحية
					52	تعرض أفلام تثقيفية صحية تناسب أعمار الطلاب
					53	يتم تدريب الطلاب حول جوانب الصحة والسلامة بالمدرسة
					54	تلقى منسق الصحة المدرسية برنامجاً تدريبياً يتعلق بالتثقيف الصحي
					55	المدرسة توجه المعلمين لربط الصحة المدرسية بموضوعات المنهاج
					56	توجه المدرسة الطلبة والعاملين لمواقع على الانترنت ذات علاقة
					57	تعقد المدرسة دورات في الإسعافات الأولية
					58	تعقد المدرسة مسرحيات تهدف للوقاية من بعض الأمراض
					59	تشجع المدرسة الطلاب على المشاركة في زيارة زملائهم المرضى
					60	تحرص المدرسة على أن يأخذ الطالب حقه في حصة الرياضة
					61	تثقف المدرسة الطلبة حول أهمية ممارسة الرياضة يومياً
					62	توعي المدرسة الطلبة بالمخاطر الناتجة عن التدخين
					63	توضح المدرسة للطلبة مخاطر الجلوس لساعات طويلة أمام الشاشات
					64	تحذر المدرسة الطلاب من تعاطي الأدوية بدون وصفة طبية

الجزء الثالث: ما هي توصياتك من أجل تحسين الوضع الصحي في المدارس؟

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(Annex 7)

اسئلة للمجموعات البورية-الطلبة

استمارة الطالب/ة

دور المدارس في تعزيز ممارسات الصحة العامة في المدارس الحكومية-قطاع غزة

عزيزي الطالب.....عزيزتي الطالبة:

- 1- تم اختيارك للمشاركة في جلسة مناقشة تهدف الى التعرف على دور المدارس في تعزيز ممارسات الصحة العامة في المدارس الحكومية -قطاع غزة.
- 2- سوف تقتصر النتائج لأغراض البحث العلمي فقط.
- 3- مشاركتك اختيارية وليست اجبارية ولك الحرية في الاجابة عن الأسئلة او عدم الاجابة عليها.
- 4- ستجد احتراماً كبيراً لوجهة نظرك ولن تؤثر على تقييمك داخل المدرسة.

وشكراً لتعاونك معنا

الباحث

عبدالله ناصر نصار

طالب ماجستير صحة عامة

## أسئلة المجموعة البؤرية (الطلبة)

1. ما تعريفك للصحة العامة؟ اذكر بعض السلوكيات الصحية التي تعرفها.
2. ما هي مصادر المعلومات التي سبق وأن تلقيت من خلالها نصائح حول الممارسات الصحية؟
3. من وجهة نظرك، المدرسة تقوم بدورها في التثقيف الصحي؟ عدد بعض الأنشطة الصحية التي تنفذها المدرسة؟
4. كيف تهتم مدرستك بالنظافة العامة والنظافة الشخصية للطالب؟
5. أتذكر أنك شاركت في أنشطة مدرسية تهدف للحفاظ على البيئة؟ اذكرها؟ وكيف يمكن للمدرسة أن تقوم بدورها في الحفاظ على البيئة؟
6. أذكر أمثلة على ممارسات صحية تعلمتها داخل المدرسة، وأثرت في نمط الحياة عندك، حتى أصبحت تمارسها يومياً
7. ما هي المعلومات /التوجيهات التي تشعر أنك بحاجة الى معرفتها حول الممارسات الصحية؟

(Annex 8)

أسئلة للمجموعات البؤرية-الأمهات

- 1- ما أهمية الممارسات الصحية على صحة الطلبة؟
- 2- هل تلقيت أي محاضرات تثقيفية حول ممارسات الصحة العامة؟ أين؟ ومتى آخر مرة؟ ومن هي الجهة المنفذة؟ وهل أصبحت لديك معلومات جديدة حول الممارسات الصحية؟
- 3- برأيك ما هو دور المدرسة في التثقيف الصحي للطلاب؟ وما دور ولي الأمر في البيت؟
- 4- تحدث عن مقترحات حول كيفية العمل والتعاون مع المدرسة لتعزيز ممارسات الصحة العامة؟
- 5- برأيك ما أهمية حدوث نقاش بينك وبين طفلك حول الممارسات الصحية؟ مع ذكر أمثلة ان وجدت؟
- 6- أتذكر ملاحظة تغيرات في المفاهيم والممارسات الصحية لدى طفلك كان مصدرها المدرسة مثل (استخدام فرشاة الأسنان-غسل الأيدي-الرياضة-النظافة ....)؟ اذكر بعض هذه التغيرات؟
- 7- برأيك ما هي المشاكل الصحية التي تواجه ابنكم داخل المدرسة؟
- 8- برأيك لمن الدور الأكبر في تعزيز ممارسات الصحة العامة، المدرسة أم البيت؟ وكيف يمكن للبيت تعزيز هذه الممارسات؟
- 9- برأيك كيف يمكن للمدرسة أن تعزز ممارسات الصحة العامة لتصبح عادةً يمارسها طفلك يومياً؟

(Annex 9)

**Correlation Coefficient of Between each Item in the Questionnaire and its Axes**

No.	The Item	Pearson correlation coefficient	Sig
<b>The first domain: Environment</b>			
9	The school gets rid of trash in a healthy way to prevent the spread of diseases.	0.636*	0.000
10	The school's administration is interested in the environment surrounding the school.	0.644*	0.000
11	Environmental Club in school is activated.	0.599*	0.000
12	The school does events related to the environment.	0.676*	0.000
13	The school is keen to educate students about how to preserve the environment.	0.612*	0.000
14	The school curriculum promotes environmental information.	0.557*	0.000
15	The school campaigns planting seedlings with the participation of students.	0.686*	0.000
16	The school reinforces students' practices that preserve the environment.	0.632*	0.000
<b>The second domain: Hygiene</b>			
17	The school cares about the cleanliness of the health units constantly (Bathrooms).	0.731*	0.000
18	The school has periodical maintenance of the health units (Bathrooms).	0.643*	0.000
19	The school takes care about the cleanliness of the hand washing basins.	0.683*	0.000
20	The hand-washing basins suits the number of school students.	0.580*	0.000
21	The school takes care about the cleanliness of the classrooms and yards.	0.717*	0.000

22	The school provides a waste paper basket inside each class.	0.722*	0.000
23	The school makes the students be aware of the importance of bathing.	0.634*	0.000
24	The school follows up the cleanliness of students from outside.	0.700*	0.000
25	The school makes the students be aware of the importance of cleanliness of mouth and teeth.	0.717*	0.000
26	The school makes the students be aware of the importance of washing hands with soap and water.	0.648*	0.000
27	The school celebrates World Day for washing hands with soap and water.	0.641*	0.000
28	The school clarifies the students the times when they have to wash their hands.	0.666*	0.000
29	The school makes the students be aware of the importance of switching underwear daily.	0.669*	0.000
30	The school is keen on providing soap for students constantly.	0.512*	0.000
<b>The third domain: Nutrition</b>		<b>Pearson correlation coefficient</b>	<b>Sig</b>
31	The school shows the students the descriptions of healthy food.	0.507*	0.000
32	The school shows the students the importance of the basic food components for the body.	0.572*	0.000
33	The school exploits the school broadcasting in educating students about nutrition.	0.623*	0.000
34	The school educates the students about the seriousness of obesity on human life.	0.577*	0.000
35	The school makes the students be aware of the diseases resulted from malnutrition.	0.692*	0.000
36	The school observes constantly the cleanliness of the canteen.	0.637*	0.000

37	The school is interested in the cleanliness of food and drinks offered to the students.	0.759*	0.000
38	The school monitors the diversity of the meals provided to students in the canteen.	0.658*	0.000
39	The school makes the students be aware of the importance of basic nutrition meals.	0.735*	0.000
40	The school is interested in educating the students about the importance of drinking water constantly.	0.665*	0.000
41	The school makes the students be aware of the importance of eating vegetables and fruit.	0.569*	0.000
<b>The fourth domain: Health Education</b>		<b>Pearson correlation coefficient</b>	<b>Sig</b>
42	In the school, there is health committee concerning with educating the students in health aspects.	0.616*	0.000
43	The school broadcasting is activated in spreading health awareness among students.	0.650*	0.000
44	The school organizes visits to some of the relevant authorities to public health.	0.637*	0.000
45	The school organizes meetings with parents of students to discuss health matters.	0.624*	0.000
46	The school works on a brochure related to public health of the students.	0.579*	0.000
47	The school prepares wall banners, which aim to raise awareness about the health aspects.	0.655*	0.000
48	The school holds health-training courses in collaboration with related parties.	0.596*	0.000
49	The school provides library with publications belonging to the school health.	0.596*	0.000
50	The teachers receive training on health aspects in school.	0.659*	0.000
51	The school specializes some classes in health seminars.	0.549*	0.000
52	The school shows healthy educational films that fit the ages of the students.	0.651*	0.000

53	The students are trained on aspects of health and safety at school.	0.636*	0.000
54	The School Health Coordinator receives a training program on health education.	0.493*	0.000
55	The school directs the teachers to connect the school health with curriculum topics.	0.563*	0.000
56	The school guides the students and staff to Web sites related to health	0.549*	0.000
57	The school holds courses in first aid.	0.531*	0.000
58	The school holds plays, which aim to the prevention of some diseases.	0.621*	0.000
59	The school encourages the students to participate in visiting sick colleagues.	0.553*	0.000
60	The school is keen on giving the student his right to share sport classes.	0.417*	0.000
61	The school educates the students about the importance of practicing exercise daily.	0.552*	0.000
62	The school makes the students be aware of the dangers resulting from smoking.	0.538*	0.000
63	The school shows the students the risks of sitting for long hours in front of the TV screen.	0.717*	0.000
64	The school warns the students from abusing drugs without a prescription.	0.690*	0.000

\*Correlation is significant at the 0.05 level

**(Annex 10)**

**List of the experts who responded by giving feedback and comments on the study instruments:**

1. Dr. Bassam Hamad                      School of Public Health, Al-Quds University
2. Dr. Yehia Abed                        School of Public Health, Al-Quds University
3. Dr. Tayseer Shorafa                 Ministry of Education and Higher Education
4. Dr. Ahmed El-Hawajri               Ministry of Education and Higher Education
5. Mr. Mahmoud Samaan                Ministry of Education and Higher Education
6. Mr. Abd-Elkareem AL-Magdalawi   Ministry of Education and Higher Education
7. Mr. Fayez AL-Serhey                Ministry of Education and Higher Education
8. Mr. Mazen AL-Batnigi                Ministry of Education and Higher Education
9. Mr. Maysera Abu-Okel                School health Department-North Gaza
10. Dr. Renan AL-Ashker                School health Department-North Gaza

(Annex 11)

**Distribution of Study Population by the Directorates of Education**

School level		Primary			Total	Secondary			Total	All level			Total
Directorate	Male	Female	Mixed	Male		Female	Mixed	Male		Female	Mixed		
Governmental schools	North Gaza	20	19	4	43	11	12		23	31	31	4	66
	Gaza	20	14	18	52	14	13		27	34	27	18	79
	East Gaza	29	29	6	64	9	13		22	38	42	6	86
	Middle area	10	1	7	18	11	13	3	27	21	14	10	45
	Khanyounes	10	11	5	26	7	7		14	17	18	5	40
	East Khanyounes	11	7	7	25	8	8		16	19	15	7	41
	Rafah	9	8	5	22	6	10		16	15	18	5	38
	<b>Total</b>	<b>109</b>	<b>89</b>	<b>52</b>	<b>250</b>	<b>66</b>	<b>76</b>	<b>3</b>	<b>145</b>	<b>175</b>	<b>165</b>	<b>55</b>	<b>395</b>

## دور المدارس في تعزيز ممارسات الصحة العامة في المدارس الحكومية-قطاع غزة

اعدد: عبد الله ناصر نصار

اشراف: د. أحمد الحواجري

أطفالنا هم مستقبلنا، لذلك يجب أن يكون هناك تعاون بين المدرسة وأولياء الأمور من أجل تعزيز ممارسات الصحة العامة عند الطلبة، التي تؤثر على التحصيل الأكاديمي عند الطلبة.

هذه الدراسة كانت تهدف الى التعرف على دور المدرسة في تعزيز ممارسات الصحة العامة في المدارس الحكومية-قطاع غزة. وكانت الأهداف الخاصة لهذه الدراسة تهدف الى تحديد دور المدرسة في تعزيز الممارسات البيئية الصحية للطلبة والتعرف على دور المدرسة في تعزيز ممارسات النظافة وتوضيح دور المدرسة في تعزيز ممارسات التغذية الصحية والتعرف على دور المدرسة في تعزيز التنقيف الصحي.

كذلك التعرف على الاختلاف في درجة تعزيز المدرسة لممارسات الصحة العامة كنتيجة لعدة متغيرات. (الجنس-العمر-المديرية-تلقى تدريب له علاقة -عدد سنوات الخبرة)، وتقييم وجهة نظر الطلبة وأولياء الأمور (خاصة الأمهات) ومنظورهم بشأن دور المدرسة في تعزيز ممارسات الصحة العامة وتقديم بعض التوصيات التي من الممكن أن تساعد في تعزيز ممارسات الصحة العامة.

وقد كانت المنهجية المستخدمة في هذا الدراسة تحتوي على مزيج من المنهج الكمي من خلال استخدام أداة الاستبيان المعبأ ذاتياً من قبل منسق الصحة المدرسية. والمنهج الكيفي من خلال مناقشة مجموعات يورية مع الطلبة والأمهات. وتتألف الدراسة من مئتين وخمسة من منسقي الصحة المدرسية الموجودين في المدارس الحكومية التابعة الى خمس مديريات تربية وتعليم وهي (شمال غزة-غرب غزة-الوسطى-خانيونس-رفح)، كذلك تم تنفيذ المجموعات الیورية في مدرستين تابعيتين لمديرتي التربية والتعليم (شمال-شرق غزة). وقد شملت أداة الدراسة أربعة محاور رئيسية وهي البيئة المدرسية-النظافة-التغذية-التنقيف الصحي.

بيّنت نتائج هذه الدراسة أن أغلب منسقي الصحة المدرسية يوافقون على أن للمدرسة دور في تعزيز ممارسات الصحة العامة في المدارس الحكومية بوزن نسبي (78.90%) ومتوسط (3.94)، حيث كان محور التغذية في الترتيب الأول وذلك بوزن نسبي (81.36%) ومتوسط (4.07)، يليه محور النظافة بوزن نسبي (79.54%) ومتوسط (3.98)، وفي الترتيب الثالث كان محور التنقيف الصحي بوزن نسبي (77.87%) ومتوسط (3.89)، وجاء في الترتيب الأخير محور البيئة بوزن نسبي (77.37%) ومتوسط (3.87).

بيّنت الدراسة أن هناك علاقة ذات دلالة إحصائية حول قيام المدرسة بدورها في تعزيز ممارسات الصحة العامة عند متغير الجنس ومتغير المديرية، حيث كانت لصالح الاناث، ومديرية غرب غزة على الترتيب. ولم يكن هناك دلالة إحصائية عند المتغيرات التالية (العمر-عدد سنوات الخبرة-تلقى التدريب ذو علاقة).

بعد عرض النتائج نجد أن هناك حاجة ماسة الى مزيد من الاهتمام في البيئة المدرسية من خلال تفعيل الأندية البيئية وضرورة توفير احتياجات المدارس من أدوات النظافة وخاصة الصابون ومواد التعقيم والتنظيف، وللمدرسة دور مهم في متابعة نظافة الحمامات وصيانتها بشكل دوري. كذلك لا بد من الاهتمام في توفير أغذية متنوعة تقدم للطلبة في المقصف المدرسي والتنسيق مع المؤسسات الداعمة لتقديم مشاريع تغذية تقدم خلالها الوجبات المفيدة صحياً للطلبة. أيضاً المدارس بحاجة الى مزيد من اللقاءات التثقيفية والبرامج الصحية التوعوية التي تستهدف الطلبة وأولياء الأمور.

أيضاً الطلبة بحاجة الى مزيد من التثقيف الصحي حول خطورة السمّة على حياة الانسان، وأهمية شرب المياه باستمرار وحوادث الطرق. كذلك وزارة التربية والتعليم بحاجة الى مزيد من التركيز على التدريب البتّاء الذي يعود بالفائدة على منسقي الصحة المدرسية والطلبة. كل ذلك لابد أن يكون موجود في دليل عمل يتم اعداده من قبل المختصين يهدف الى توضيح دور المدرسة والمجتمع في تعزيز الممارسات الصحية عند الطلبة.

أخيراً الإدارة المدرسية وفريق الصحة المدرسية يجب أن يقوموا بتوجيه الطلبة والعاملين داخل المدرسة على مواقع الانترنت ذات العلاقة بالصحة ومشاركة الطلبة في زراعة الأشتال داخل المدرسة.