

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

Abdallah Naser Nassar

Al- Butana University

Mohammed Jebreldar Abuanja Nimer

Department of Community Health Nursing- Faculty of Nursing Sciences || International University of Africa(IUA)

Ahmed Mohammed Hawajri

Al- Quds Abu Dis University

Abstract: This study aimed to Assessment the role of schools in promoting public health practices in governmental schools- Gaza strip. 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 caregivers). The study sample was 170- school health coordinator, from governmental schools, located in directorates of education in North Gaza, West 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 fourth 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 west Gaza. Study findings highlight the need for more attention in the cleanliness and continuous maintenance of bathrooms in schools, and the study recommended that students needs a food program in school. In addition, environmental clubs in schools should be more activation. Moreover, MEHE should be more attention in training SHC, especially about promoting public health practices. Finally, schools need more health education meetings for students and caregivers.

Keywords: Ministry of Education and Higher Education, School Health Coordinator.

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

عبد الله ناصر نصار

جامعة البطانة

محمد جبرالدار ابوعنجة نمر

كلية علوم التمريض || جامعة افريقيا العالمية || السودان

أحمد محمد الحواجري

جامعة القدس أبو ديس

الملخص: هدفت هذه الدراسة إلى التعرف على دور المدرسة في تعزيز ممارسات الصحة العامة في المدارس الحكومية- قطاع غزة. وتمثلت الأهداف الخاصة لهذه الدراسة في 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 التثقيف 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 الاستبانة المعبأة ذاتياً من قبل منسق الصحة المدرسية. والمنهج الكيفي من خلال مناقشة مجموعات بؤرية مع الطلبة والأمهات. وتتألف الدراسة من مئتين وخمسة من منسقي الصحة المدرسية الموجودين في المدارس الحكومية التابعة لخمسة مديريات تربية وتعليم وهي (شمال غزة- غرب غزة- الوسطى- خانينونس- رفح)، كذلك تم تنفيذ المجموعات البؤرية في مدرستين تابعتين لمديرتي التربية والتعليم (شمال -شرق غزة). وقد شملت أداة الدراسة أربعة محاور رئيسية وهي: البيئة المدرسية- النظافة- التغذية- التثقيف الصحي. بينت نتائج الدراسة أن أغلب منسقي الصحة المدرسية يوافقون على أن للمدرسة دوراً 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 التثقيف الصحي بوزن نسبي (77.87%) ومتوسط (3.89)، وجاء في الترتيب الأخير محور البيئة بوزن نسبي (77.37%) ومتوسط (3.87). كما بينت الدراسة أن هناك علاقة ذات دلالة إحصائية حول قيام المدرسة بدورها في تعزيز ممارسات الصحة العامة عند متغير الجنس ومتغير المديرية، حيث كانت لصالح الإناث، 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 إلى مزيد من الاهتمام بالبيئة 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 بتوفير أغذية متنوعة تقدم للطلبة في المقصف المدرسي والتنسيق مع المؤسسات الداعمة لتقديم مشاريع تغذية تقدم خلالها الوجبات المفيدة صحياً للطلبة. أيضاً المدارس بحاجة إلى مزيد من اللقاءات التثقيفية والبرامج الصحية التوعوية التي تستهدف الطلبة وأولياء الأمور. أيضاً الطلبة بحاجة إلى مزيد من التثقيف الصحي حول خطورة السمنة على حياة الإنسان، وأهمية شرب المياه باستمرار وحوادث الطرق. كذلك وزارة التربية والتعليم بحاجة إلى مزيد من التركيز على التدريب البناء الذي يعود بالفائدة على منسقي الصحة المدرسية والطلبة. كل ذلك لا بد أن يكون موجوداً في دليل عمل يتم إعداده من قبل المختصين بهدف إلى 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 الإنترنت ذات العلاقة بالصحة ومشاركة الطلبة في زراعة الأشجار داخل المدرسة.

الكلمات المفتاحية: وزارة التربية والتعليم العالي، منسق الصحة المدرسية.

1- Introduction.

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 spending 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 non- refugee students receive services through United Nations Relief and Work Agency for the Palestinian refugees in the near east (UNRWA).

SHP is including all the strategies, activities, and services offered by, in, 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 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 1st 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 will conduct this study to Assessment the role of schools in promoting public health practices in governmental schools - Gaza strip.

2- Methods and material

2- 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 Assessment 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).

2-2 Study setting

This study conducted in the GOS for the academic year 2019- 2020 in the five governorates of Gaza: North Gaza, Gaza, Middle Area, Khan Younes, and Rafah.

2- 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 2019, from the (MEHE) to work with the schools to be targeted within the research. The pilot study was conducted at the beginning of September 2019. The data collection was performed and completed in the last week of September 2019. Data entry was finished by the half of October 2019, followed by data analysis and report writing until November 2019.

2-4 Inclusion and exclusion criteria

Inclusion Criteria

- 1- All school health coordinators for the academic year 2019- 2020 in governmental schools- GS.
- 2- 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
- 3- All caregivers (mainly the mothers), particularly the mothers for all students who are included in the study.

Exclusion Criteria

- 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- Teachers for other subjects at schools of the study area.
- 4- Mothers of students who are excluded from the study criteria.

2-5 Study instruments

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

Quantitative method

The self- Administrated questionnaire was the main instrument in data collection. 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, It included questions related to socio- demographic factors and items to Assessment 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). The second section include items in order to answer the research questions and SH axes. The questionnaire will cover 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.

A questionnaire in Arabic was developed to accomplish the objectives of this research to Assessment the role of schools in promoting public health practices.

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) Disagree (2) Completely Disagree (1)

Qualitative method

The second instrument was open- ended (semi- structured) questions. The researcher within focus groups asked those questions with students and caregivers.

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

2-6 Data Entry and Analysis

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, in addition Chi square test was used to examine the statistical relationship between the categorized variable. Scheffe- test was done to see

the direction and significance differences between each variable categories of demographic variables and their impact on the areas of questionnaire. Chi- square test was done to statement significant differences between two variables.

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.

2-7 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 2019.

Another approval was obtained from the school of public health at Al- Quds University asking the MEHE to facilitate the researcher work.

Then the administrative approval obtained from MEHE in order to facilitate the process of data collection.

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

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 will delivered to them.

3- 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 paragraphs, 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.

Results of Demographic Data

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 1:

Table (1) Number and Percentage of Complete and Missing Questionnaires

	Frequency	Percentage
complete questionnaires	170	82.9%
Missing questionnaires	35	17.1%
Total	205	100.0%

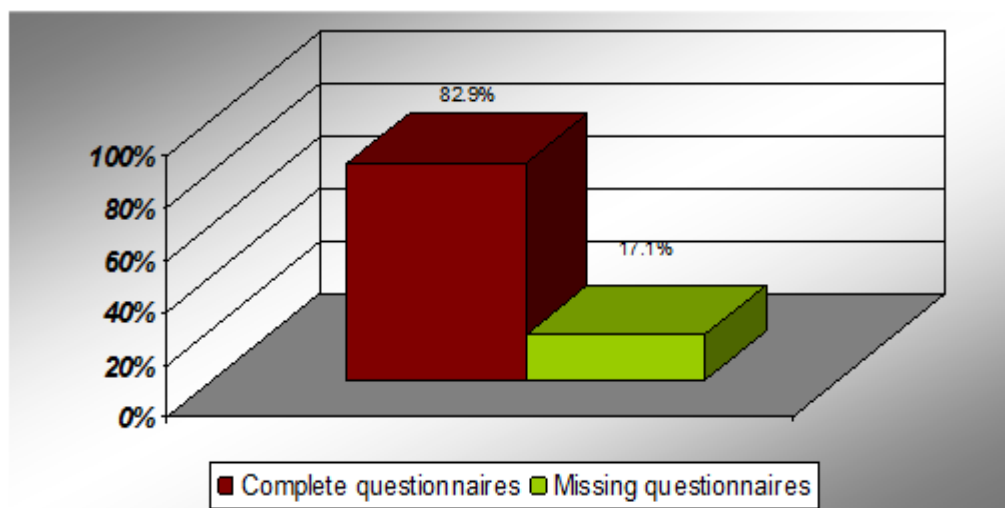


Figure (4.1) Number and Percentage of Complete and Missing Questionnaires

The results showed in table 2, indicate that out the total SHC in five areas, 22.3% were from North of Gaza, 26.5% were from the West 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 (2) Distribution of SHCs by Demographic Variables

Variables		Frequency	Percentage
Gender	Male	71	41.8
	Female	99	58.2
Directorate	West Gaza	45	26.5
	North Gaza	39	22.3
	Middle area	32	18.8
	Khan Younes	21	12.4
	Rafah	34	20
Age	20- 29	16	9.4
	30- 39	87	51.2

Variables		Frequency	Percentage
	40- 49	43	25.3
	More than 49	24	14.1
Training	Yes	115	67.6
	No	55	32.4
Years of Experience	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

Training of school health coordinators about public health practices:

As mentioned in the table 2, 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". Table 3 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 (3) The institutions, which was responsible on training courses:

No	Institution	Frequency	Percent
1	Ministry of Education and Higher Education	36	31.3
2	Ministry of Health	22	19.1
3	UNICEF	20	17.4
4	Red Cross	12	10.4
5	Palestinian Red Crescent	10	8.7
6	Islamic Relief	6	5.2
7	Palestinian Civil Defense	5	4.3
8	Environmental Quality Authority	4	3.5

Table 4 and Figure 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) The range and percentage of training course hours:

Training Hours	Frequency	Percent
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%
Total	115	100 %

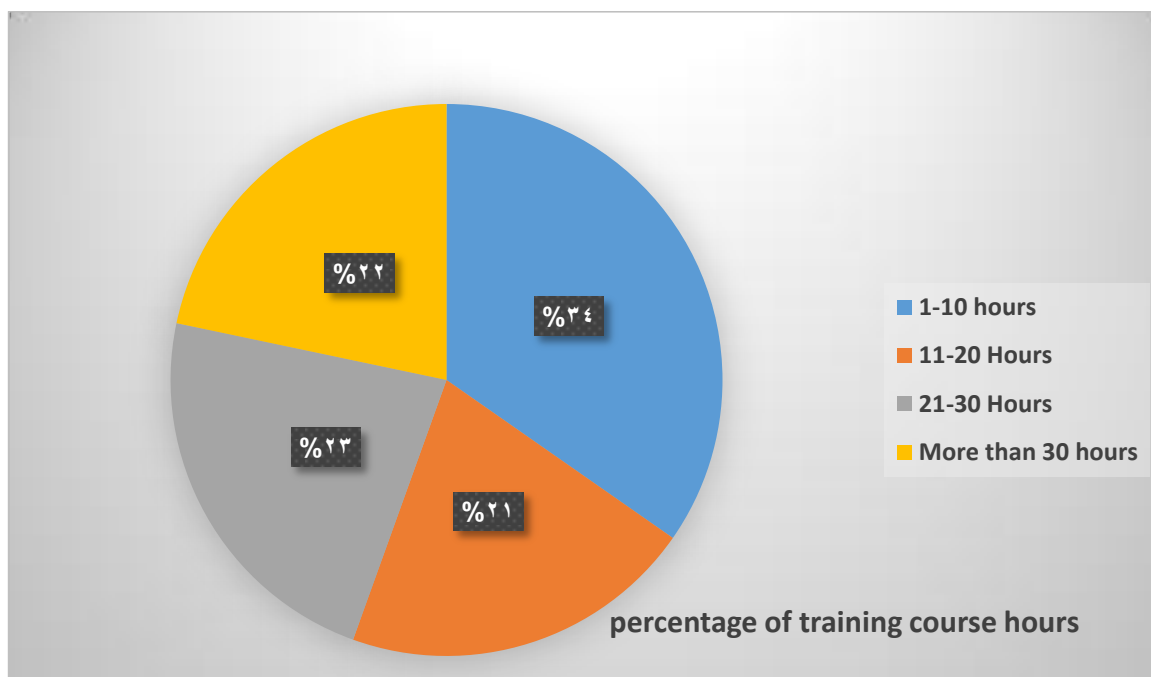


Figure (4.2) The range and percentage of training course hours

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.

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

Through a table 5, 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 axe. And it is clear that the relative weight of the total of the four axes is 78.90%, while the sub- areas was 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 Aga & Al- Gergawi (2010) study, which found that the schools were interested in school environment as the first priority with relative weight 91.46%.

Table (5) The role of schools in promoting public health practices in the four axes:

No	Axes	Mean	Std. Deviation	relative weight	T.test	p- value	Rank
1	Environment	3.87	0.58	77.37	18.43	0.000	4
2	Hygiene	3.98	0.61	79.54	19.81	0.000	2
3	Nutrition	4.07	0.53	81.36	24.82	0.000	1
4	Health Education	3.89	0.51	77.87	21.81	0.000	3
The total of the four axes		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).

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 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% (Aga & AL- Gergawi, 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 first 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.

The role of schools in promoting hygiene practices:

Results 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 first 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 role of schools in promoting nutritional health practices:

The following results 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 first 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 Aga &Al- Gergawi (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.

The role of schools in promoting health education:

The results 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% (Aga & AL- Gerjawi, 2010).

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 first 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 attributes 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.

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 5 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.

Table 5 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.

Table 5 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.

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 (6) The relation between promotion of public health practices and the four axes:

Axes	Pearson correlation coefficient	p- value
Environment	*0.788	0.000

Axes	Pearson correlation coefficient	p- value
Hygiene	*0.903	0.000
Nutrition	*0.856.	0.000
Health Education	*0.925	0.000

Socio- demographic

i. The role of schools in promoting public health practices related to gender

Table 6 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 (7) 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			

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.

i. 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. The students agreed, "They like to hear advices about their health and they 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.

ii. 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, " She always tells her husband to save soap, toothbrush and toothpaste for their 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 Saheer (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 Aga &Al-Gergawi (2010) study, which found that the schools interested in the cleanliness of toilets with relative weight 69.77%.

4- 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- Duplication of hand washing basins is very important to make proper ratio between their numbers and the numbers of students.

- 9- Students need to learn about the seriousness of obesity on human life, the importance of drinking water constantly, and road safety.
- 10- MEHE should seek the support of institutions especially on provide food program for students.
- 11- SM and school health committee should guides the students and staff to websites related to health.
- 12- Prepare public health practices manual as a guide for schools.

5- References

- Al- Demah, M. (2012). The Association of Lifestyle Determinants and Body Mass Index with School Achievement of Ninth Grade Students in the District of Tulkarm, Palestine. An- Najah National University.
- Al- Gergawi, Z. A., & Aga, M. H. (2010). The Situation of Health Education Application in Governmental Schools in Gaza City. Gaza, Palestine: Alazher University- Gaza.
- Al- Qarny, H. M. (2007). The role of School Administration in Achieving the Goals of Health Education in Elementary school in Al- Taif City. Al- Taif: Umm AL- Qura University.
- Al- Sarairah, k., & Al- Rashidi, T. (2012). School Health Level in Primary Schools in the State of Kuwait from Female Principals and Teachers' Point of View. 26, 10. Jordan: Middle East University.
- AL- Serhy, F. (2014, December). Evaluation of School Canteens in Gaza Governorate schools - Palestine in the Light of Standards Guidelines of Environmental Health for Schools. Gaza, Palestine: The Islamic University- Gaza.
- Allensworth, D., Lawson, E., Nicholson, L., & Wyche, J. (1997). Schools and Health:Our Nation's Investment. National Academic Press.
- American School Health Association. (2009). Nursing's social policy statement: The essence of the profession. Nurses books. org.
- Anderson, j., Wareen, C., Perez, E.M Louis, R., Philips. s., Wheeler, J., Cole, M., & Misra, R. (2008). Gender and ethnic differences in Hand hygiene practices among college students. AJIC. 36(5), 361-368.
- Arun, K. p., Shankar. S., Sowmya, J. & Priyaa. C.V (2010). Oral health knowledge, attitude, practice of school students of KSR matriculation school, Thiruchengode. JIADS, 1, 05- 11
- Association of Schools of Public Health. (2007). Public Health Practice Council. public health definition.
- Cavill, N., Kahlmeier, S., & Racioppi, F. (2006). Physical activity and health in Europe: evidence for action. World Health Organization.

- Centers for Disease Control and Prevention. (2011). School health guidelines to promote healthy eating and physical activity. MMWR. Recommendations and reports: Morbidity and mortality weekly report. Recommendations and reports. CDC.
- Centers for Disease Control. (2013). Make a difference at your school.
- Commission on Social Determinants of Health CSDH. (2008). Health Equity Through Action on the Social Determinants of Health. Geneva: WHO.
- Palestinian Central Bureau of Statistics (PCBS), (2011). Palestinian Central Bureau of Statistics Report.
- Palestinian Central Bureau of Statistics (PCBS), (2015). Palestine at the End of Year, 2015. Ramallah - Palestine. <http://www.pcb.gov.ps>
- Palestinian Central Bureau of Statistics, (PCBS) (2015). Palestine in Figures 2014. Ramallah - Palestine.
- Park, J. E., & Park, K. (2009). Textbook of preventive and social Medicine. 20th. Jabalpur: M/S Banarsidas Bhanot.
- Saher, G. F. (2012). The Role of School Management in Activating Health Education at the Primary Stage in Provinces of Gaza. Gaza: Alazaher University- Gaza.
- Sansolios, S., & Egberg, M. B. (2011). Views of parents, teachers and children on health promotion in kindergarten. International Journal of Pediatric Obesity, 6, pp. 28- 32.
- Singh, K. (2007). Quantitative Social Research Methods. London: Sage publications.
- Smith, M. (2008). <http://ocw.jhsph.edu/course/socialbehavioralaspectpublichealth-/pdfs/unit2gender.pdf>. Retrieved 07 2016, from Sex, gender, and health. Johns Hopkins University (JHU).
- Soumya, D., Dutta, S., Dasgupta, A., & Misra, R. (2010) Relationship of personal hygiene with nutrition and morbidity profile: A study among primary school children in south Kolkata. Indian Journal of Community Medicine, 35(2) 280- 284. Retrieved on April 08, 2016, from <http://www.ijcm.org.in/article.asp?issn=09700218;year=2010;volume=35>
- The First International conference on health promotion. (1986). Ottawa Charter. Ottawa.
- United Nations for Children's Fund (UNICEF), (2010). The situation of Palestinian children in the Occupied Palestinian Territory, Jordan, Syria and Lebanon.
- United Nations for Children's Fund (UNICEF), (2010). Water, Sanitation, and Hygiene Household Survey: WASH Household Survey. UNICEF, GAZA.
- Virginia School Health Guidelines. (1998). School Health Services (Vol. Chapter 3). www.doe.virginia.gov.
- Weizberg, M., Cambria, B., Farooqu, Y., Hahn, B., Dazio, F., Maniago, E. M., et al. (2011). Pilot study on documentation skills: is there adequate training in emergency medicine residency? The Journal of emergency medicine, 40(6), 682- 686.
- Westhuizen, V. d. (2005). Schools as Organizations (Vol. 2nd edition). Pretoria: Van Schaik Publishers.

- Whetten, D. A. (2002). Modelling- as- Theorizing: A Systematic Methodology for Theory Development. In D. Partington, Essential Skills for Management Research. london: Sage publications.
- World Health Organization (WHO), (1996). Violence Prevention: An Important Element of a Health-Promoting School. The Status of School Health, Document Three. Geneva.
- World Health Organization (WHO), (2005). World Health Organization Health Definition.
- World Health Organization (WHO), (2012). Gaza Strip Initial Needs Assessment. Office of the Occupied Palestinian Territory. <http://www.emro.who.int/palestine>.
- World Health Organization (WHO), (2012). Local Action: creating health promoting schools. WHO, 2000.SCHOOL/003.
- World Health Organization (WHO), (2012). Monitoring and Evaluation Guidance for School health. Draft for Review.
- World Health Organization WHO. (2005). Local Action: Creating Health Promoting Schools. WHO/SCHOOL/00.2.