

Assessment of the Quality of School Health Services and School Environment in Governmental Schools at Khan Younis and Rafah Governorates, Palestine

Naji M Abu Luli¹, Zeyad Abu Heen², Ayman Abu Mustafa^{3*} and Yousef Aljeesh⁴

¹Clinical Instructor, Palestine College of Nursing, Ministry of Health, Gaza, Palestine

²Department of Environment and Earth Sciences, Islamic University, Gaza, Palestine

³Palestine College of Nursing, Khan Younis, Gaza Strip, Palestine

⁴Faculty of Nursing, Islamic University, Gaza, Palestine

***Corresponding Author:** Ayman Abu Mustafa, Palestine College of Nursing, Khan Younis, Gaza Strip, Palestine.

Received: November 05, 2019; **Published:** December 10, 2019

Abstract

Background: This study is considered one of the most important studies that should be highlighted in order to raise the developmental level of the state in all fields, especially the educational institutions, since the child today is the man of the future and for this the government should pay great attention to his health.

Objectives: this study aimed at assessing the quality of school health services and school health environment in governmental schools at Khan Younis and Rafah Governorates.

Methods: The researcher used the descriptive analytical design in the study. Since population size is relatively small, the researcher considered the population as the sample of study (census), which consists of the school health coordinators in governmental schools at Khan Younis and Rafah Governorates whose number (97). The researcher used a questionnaire for the school health coordinators whose number (97). The researcher verified the validity and reliability of study tool.

Results: The findings of the study indicated that the level of implementing health services in governmental schools at Khan Younis and Rafah Governorates was very good with weight mean 85.6%, moreover, the level of the school health environment was very good with weighted mean 84.4%.

Conclusion: The field of school health services in the governmental schools at Khan Younis and Rafah Governorates is high quality but needs some recommendations as appointing a resident nurse for each group of near schools to deal with emergencies occurring at these schools, support the school health team with modern equipment, and improving the environment services of the school, especially with regard to water center and daily supervision and provision of supplies.

Keywords: Quality; School Health Services; Khan Younis; Rafah

Background

The school is considered the second mother to students which affects in the construction and the preparation of the students. It's the place where students spends most of his time. It has an important role in the upbringing of students, responding to their basic needs and providing of health services to students and maintain them [1].

The school health program is considered one of the most important components of the school and its group of concepts, principles and systems provided to reinforce students health in the school age and reinforce society’s health through schools [2]. The school health has a group of interests including medical services fields, school environment fields, health education and canteen, nutritional fields. The supervisors on education cooperation with the Ministry of Health focus on the necessity of attention on the school health and its fields.

School Health Services (SHS) constitute one of the components of the School Health Program (SHP) and deal with the maintenance of the health of school children. Effective SHS facilitate early detection and diagnosis of diseases, whereby prompt intervention ultimately reduces school-age morbidity and mortality [3].

The school health services are offered to students in the first, seventh and tenth grades in the governmental schools in the Gaza Strip which totalling 400 schools. The coverage rate for a medical examination was 96% in 2015 - 2016, the number of students who were examined was 63295 students out of 65996 students [4].

The attention of the school health began after the Ministry of Education had taken charge in 1994, from the Palestinian National Authority, where there was a special department for school health in the directorates of education. A teacher has been assigned at each school to conduct medical supervision inside the school in addition to his work as a teacher and called school health coordinator.

The researcher carried out this study to assess quality school health services provided to students and he hopes the responsible of school health programs in Ministry of Education and Ministry of Health could benefit from its results.

Materials and Subjects

Study design

The design of this study was a descriptive, analytical cross-sectional one. This method is appropriate for description of the status of phenomenon and its relationship and comparison between variables.

Setting and period of the study

The study was carried out in governmental schools at Khan Younis and Rafah Governorates, the study was conducted during the period from April 2017 and end in November 2017.

Study population and sampling

The study population and sampling is consist of the school health coordinators in governmental schools at Khan Younis and Rafah Governorates whose number (97) present in table 1.

	Rafah schools	East Khan Younis schools	West Khan Younis schools	Total
The number of school health coordinators	35	37	32	104
Response	34	33	30	97
Percent of response	(97)%	(89)%	(93)%	(93)%

Table 1: The number the school health coordinators and their response.

Study instruments

The researcher used a structured questionnaire for collecting data, the researcher used Likert scale of 5-points to prepare structured questionnaires according to literature review and researcher experience in school field.

Data analysis was conducted using Statistical Package for Social Sciences (SPSS 24) for statistical analysis. Data was collected in the period 23/8/2017 to 10/10/2017.

Ethical considerations

The researcher was committed to all ethical consideration required to conduct a research. Ethical approval was obtained from General Administrator of School Health in Ministry of Education and Higher Education. Also, an official approval was obtained from General Directorate of planning in Ministry of Education and Higher Education. Moreover, an official approval was obtained from Directorate of Education Rafah, also an official approval was obtained from Directorate of Education east Khan Younis, and an official approval was obtained from Directorate of Education Khan Younis.

Results

Table 2 shows the distribution of participant’s characteristics according to their sociodemographic characteristics. There are 40.2% of study participants have age between 36 - 45 years and 33.0% have age above 45 years. Regarding the distribution of study participants according to their gender, (61.9%) of the study participants were females while 38.1% were males. There are 88.7% of the study participants married and 11.3% were not married. Regarding to educational level, 88.7% of the participants had a BSc certificate while 3.1% higher degree, about 55% of the participants had experience more than 10 years while 4.1% less than 5 years. There are 48.5% of study participants work in girls school and there are 36.0% work in boys school. Regarding the distribution of study participants according to their directorate, (35.1%) of the study participants were work in Rafah while 34.0% in Eastern KhanYounis and 30.9% in Western KhanYounis.

Items	No.	100 %
Age		
Less than 35 years	26	26.8
From 36 to 45 Years	39	40.2
More than 45 Years	32	33.0
Total	97	100.0
Gender		
Male	37	38.1
Female	60	61.9
Total	97	100.0
Marital Status		
Not Married	11	11.3
Married	86	88.7
Total	97	100.0
Education Level		
Diploma	8	8.2
Bachelor	86	88.7
High Degree	3	3.1
Total	97	100.0

Experience Years		
Less than 5 Years	4	4.1
From 5 to 10	40	41.2
More than 10 Years	53	54.6
Total	97	100.0
Type of School		
Boys	35	36.0
Girls	47	48.5
Mix	15	15.5
Total	97	100.0
Directorate		
Eastern KhanYounis	33	34.0
Western KhanYounis	30	30.9
Rafah	34	35.1
Total	97	100.0

Table 2: Distribution of the study participants according to their demographic data.

Topics	Weighted Mean (%)	Median	Std
Topic 1: Field of School Health Services	85.6	87.4	8.9
Topic 2: Field of School Health Environment	84.4	84.6	9.2
Total	85.0	86.0	9.1

Table 3: Distribution of the study participants according to their responses about Topics by mean, median and standard deviation.

Phrase	Mean	Weight Mean (%)	Std
There is a prior coordination with school when conducting examinations and giving vaccinations for students.	4.6	92.0	0.7
School Health Team in corporation with school health committee conducts comprehensive periodic medical examinations for all students concerned.	4.6	91.4	0.7
Oral and dental examinations are performed for students.	4.6	91.4	0.7
The list of checked and transferred students is prepared according to attached forms in the guide for health services.	4.6	91.2	0.6
The school health team prepares a monthly report about school visits and detected cases.	4.5	90.8	0.6
Vaccinations are given according to schedule of the ministry of health.	4.5	89.8	0.7
Information and examinations are recorded in a medical file for the student.	4.5	89.4	0.7
Vaccinations are recorded in the health file of the student.	4.5	89.4	0.7
Suitable place for the health check is prepared to ensure privacy of students during the check.	4.5	89.2	0.8
Student with infectious disease is excused from school attendance.	4.4	88.6	0.8
Examinations and vaccinations are sufficient for students.	4.4	88.6	0.8

Students are physically prepared for the health check.	4.4	88.2	0.7
Disease cases that detected from students are transferred to competent health centers and follow up therapy and discuss it with parents.	4.4	87.6	0.8
Absent students who have failed to obtain medical services are followed up.	4.4	87.4	0.7
Emergency diseases cases are followed up and suitable first aid is provided.	4.4	87.2	0.6
All appropriate precaution are taken to control infectious diseases when the first case at school occurs.	4.3	86.4	0.8
The school health team is committed to the time and place set for it.	4.3	86.2	0.7
Vaccinations are saved in the appropriate refrigerator.	4.3	85.0	0.8
Infection control measures are taken when vaccinations are given.	4.2	84.4	0.6
Students are psychologically prepared for the health check.	4.2	83.2	0.9
Ensure ask and investigate about the possibility of any infectious diseases during routine visit to schools.	4.2	83.2	0.9
The number of school health team is sufficient to conduct the process of examination for students without affecting their school achievement.	4.1	82.2	0.9
There is special care plan for students with special needs.	4.0	79.4	0.9
Family and local community participate in any activities related to the prevention of infectious diseases.	3.8	76.2	0.9
The medical history of the student and his/her family is recognized.	3.8	75.4	1.0
School health team uses modern equipment and suitable methods for detection and examination.	3.7	74.0	0.9
The acute disease (Diarrhea, cold, flu, etc.) of students are followed up and treated.	3.7	73.2	1.0
Total	4.3	85.6	8.9

Table 4: Distribution of the study participants according to their responses about Topic Field of School Health Services.

Phrase	Mean	Weight Mean	Std
There is a first aid kit in the school.	4.6	92.2	0.6
Water tanks are monitored and sealed.	4.5	89.6	0.6
Tanks and drinking water safety is inspected.	4.5	89.4	0.6
Schools are provided with cleaning materials.	4.4	88.4	0.7
Safety and security factors for students are evaluated.	4.4	87.6	0.6
Toilets at schools are inspected for cleanliness.	4.4	87.4	0.7
School environment is supervised to ensure that it is suitable for students' health needs such as (student's seats, lighting, ventilation and heating).	4.4	87.2	0.7
The school health team in corporation with the health committee supervises the processing of the first aid a cupboard.	4.1	82.8	0.8
Proper ways and methods of waste disposal are ensued in schools.	4.1	82.6	0.7
The first aid kit contains all supplies.	4.0	80.2	0.9
Drinking water samples are taken for laboratory test periodically.	3.9	77.2	1.1
Water and soap are provided in student's toilets.	3.9	77.0	1.0
The number of students in the classroom corresponds to the classroom area.	3.8	75.2	1.1
Total	4.2	84.4	9.2

Table 5: Distribution of the study participants according to their responses about Topic 3: Field of school health environment.

Discussion

The weighted mean of all topics was 83.5%, while the highest topics was Topic 1: Field of school health services with weighted mean 85.6%, followed by Topic 2: Field school health environment with weighted mean 84.4%.

The researcher found that the level of implementing school health services in governmental schools at Khan Younis and Rafah Governorates with high level with weight mean 85.6%, this is due to several reasons. The first reason is the interest of the Ministry of Health and Ministry of Education. Secondly, the full coordination between the two ministries, their concern to conduct the tests fully to detect diseases early and the existence of a plan of work for the school health team.

According to the results the highest paragraph was "There is a prior coordination with school when conducting examinations and giving vaccinations for students" with weighted mean 92.0% and significance less than 0.05, followed by paragraph "School health team in corporation with school health committee conducts comprehensive periodic medical examinations for all students concerned" with weighted mean 91.4%. While the lowest paragraph was "The acute disease (Diarrhea, cold, flu, etc.) of students are followed up and treated" with weighted mean 73.2% and significance less than 0.05, followed by paragraph "School health team uses modern equipment and suitable methods for detection and examination" with weighted mean 74.0%. According to the result of this topic, the participant agree and had a positive attitude about this topic.

These results are consistent with the results of Jerjawi [5] who showed that school health services applied with high degree with weighted mean (87.51) and also consistent with the results of Serdaty [1] who showed that school health services applied with high degree with mean (3.72).

On the other hand, these results are inconsistent with the results of Badh [6] who showed that school health services applied with medium degree, with mean (3) percent 60% and also inconsistent with the results of Atta [7] and Al-Ghazali, 2015 who show that school health services applied with medium degree, because of lack of adherence to the periodic examination by some doctors and the great shortage of human and physical supplies.

And also the researcher found that the weighted mean for topic of the field of school health environment was 84.4% and significant less than 0.05 which mean the participants agree about this topic. According to the results the highest paragraph was "There is a first aid kit in the school" with weighted mean 92.2% and significance less than 0.05, followed by paragraph "Water tanks are monitored and sealed" with weighted mean 89.6%. While the lowest paragraph was "The number of students in the classroom corresponds to the classroom area" with weighted mean 75.2% and significance less than 0.05, followed by paragraph "Water and soap are provided in student's toilets" with weighted mean 77.0%. According to the result of this topic, the participant agrees and had a positive attitude about this topic.

In the present study researcher found that level of the school health environment in governmental schools at Khan Younis and Rafah Governorates is very good with weighted mean (84.4%), due to the importance of this field, moreover, school administration and school health team is aware of the need to protect and care for the school environment to accommodate the students studying and get them the highest grades.

These results are consistent with the results of Jerjawi [5] who showed that the school monitors the school's healthy environment carefully with weighted mean (91.46) and also consistent with the results of [1] who showed that he school environment in primary schools represents a healthy environment for students with high degree with mean (3.80).

On the other hand, These results are inconsistent with the results of Al-Ghazali, *et al.* [8] and Omar [9] who showed that the level of the school health environment was weak because of the weakness of periodic supervision of health units.

Conclusion

The field of school health services in the governmental schools at Khan Younis and Rafah Governorates is high quality but needs some recommendations as appointing a resident nurse for each group of near schools to deal with emergencies occurring at these schools, support the school health team with modern equipment, and improving the environment services of the school, especially with regard to water center and daily supervision and provision of supplies.

Acknowledgment

First and foremost, I thank Allah for helping me every moment and during my study.

I would like to express my profound and sincere gratitude to my supervisors, Dr. Zeyad Abu Heen and Prof. Dr. Yousef Aljeesh, for their ongoing encouragement, valuable comments, support, advice and endless patience in improving my writing. I have learned a lot of experiences from them. I really appreciate that. Thanks so much Dr. Zeyad Abu Heen and Prof. Dr. Yousef Aljeesh.

My great thanks and gratitudes to the department of Earth Science and Environmental at Islamic University. My great thanks and gratitudes to my classmates of the Master Programme of environmental health for spending nice time during our study in Islamic University.

I will not be thankful if I do not mention my family for being there when I needed them most, also for their constant encouragement during my study period.

My gratitude also to my colleagues who always offer help and suggestions of practical value and encouragement during my study period.

Last but not least, I would like to thank the Ministry of Health and the Ministry of Education in Gaza Strip for its acceptance and supporting for this research.

Declaration of Interests

We declare no competing interests.

Bibliography

1. Serdaty F. "The reality of school health in Algeria from the viewpoint of the actors in the sector - a field study in the detection and follow-up units, primary schools and public health institutions in the wilaya of Biskra" (2014).
2. Abu Zaida Hatem. "The Effectiveness of the Multimedia Program for the Development of Health Concepts and Health Awareness in Science for Sixth Grade Students". Unpublished Master Thesis, Faculty of Education, Department of Curriculum and Educational Technology, Islamic University, Gaza (2006).
3. Oyinlade OA., *et al.* "An evaluation of school health services in Sagamu, Nigeria". *Nigerian Journal of Clinical Practice* 17.3 (2014): 336-342.
4. MOH. "School health annual report, Gaza Strip, Palestine" (2016).
5. Jerjawi., *et al.* "The reality of the application of health education in public education schools in Gaza City". *Al-Azhar University Journal, Gaza, Humanities Series* 13.1 (2011).

6. Badh A. "The Reality of Health Services Programs Presented to Students of Zarqa Governorate Schools from the School Principals Points of View". *An-Najah University Journal for Research* 21.2 (2006): 373-394.
7. Atta and Ezz El Din Awad Ahmed. "Evaluation of health services for physical education in secondary schools for boys in Khartoum State". *Sudan University of Science and Technology* (2003).
8. Al-Ghazali Y., *et al.* "Evaluation of the implementation of the school health program in basic education schools in Lattakia city". *Tishreen University Journal for Research and Scientific Studies-Health Sciences Series* 38.2 (2017).
9. Omar KAB. "The role of male and female principals of public schools in providing health services to school of Jerash-Jordan". *European Scientific Journal* 9.13 (2013): 315-326.

Volume 2 Issue 1 January 2020

©All rights reserved by Ayman Abu Mustafa., *et al.*