

# Evaluate the Role of the School Health Visitors and Students Opinion Regarding the Implementation of the School Health Program

<sup>1</sup>Sabah Mohammed El Sayed Sharshor, <sup>2</sup>Entisar Abo Elghite Elhossiny Elkazeh, <sup>3</sup>Neamate mazlom Fahmy

<sup>1</sup>Lecturer of Pediatric Nursing, Faculty of Nursing, Tanta University Egypt

<sup>2</sup>Assistant. Professor of Community Health Nursing, Faculty of Nursing, Tanta University Egypt.

<sup>3</sup>Lecturer of Community Health Nursing, Faculty of Nursing, Tanta University Egypt  
dr.entisaraboelghit@gmail.com.

---

**Abstract:** Background: All children have the right to a safe, supportive and healthy school environment. After the students' home, school represents the second most influential environment in a child's life. The school considers an important setting for promoting health. The school is since long acknowledged as an important setting in public health because it has a unique opportunity to increase the knowledge and awareness of health from an early age. The school health visitors have a crucial role in the seamless provision of comprehensive health services to children and youth. The aim of the study: Evaluate the role of the school health visitors and students opinion regarding implementing of the school health program. Design and Setting: cross sectional descriptive study design was used in this study. It was conducted in different preparatory schools at Al-Gharbiya Governorate from January to June 2017. Subject: all available school health visitors (62) working at Tanta city and 500 students from four preparatory schools. Tools: three tools were used for data collection, Tool (1) Structure questionnaire sheet for nurses to evaluate the role of the school health visitors regarding comprehensive health examination, preventive services, school medical treatment services and the school health environment, Tool (2) Opinions of the school health visitors regarding; applications of school health services, obstacles facing the health visitors activities, training needs for them and suggestion to improve their health care activities, and Tool (3) Opinions of the students regarding comprehensive health examination, preventive services, school medical treatment services and the school health environment ; Results: It was reported that about half of both nurses and students had good opinion regarding pre, during and after health examination services and all of the nurses agree that present of certain obstacles to performing their tasks as little advanced resources, little workers or cleaner in the schools Conclusion and Recommendation: Based on the findings of the present study, the nurses need in-service training and the school needs effective materials and human resources to perform their activities.

**Keywords:** Health visitors, School, Students.

---

## 1. INTRODUCTION

Children go through distinct periods of development as they move from infants to young adults. During each of these stages, multiple changes in the development of the brain are taking place. The school-age period could be a time of the vital developmental stage. It includes the physical, intellectual, language, and social-emotional <sup>(1, 2)</sup>. After the child's home, the school represents the second most important setting in a child's life. The school provides a very important setting for promoting health as they reach over a million children and their families worldwide. All children have the right to a safe, supportive and healthy school environment. The school is since long acknowledged as an important setting in the public health because it has a unique opportunity to increase the knowledge and awareness of health from an early age <sup>(3)</sup>.

The school health visitors have a crucial role in the seamless provision of comprehensive health services to children and youth. Increasing the numbers of the students who enter schools with chronic health conditions that require management during the school day. The school health visitors perform a vital role within the school health program by lead in the development of policies, programs, and procedures for the provision of school health services. The school health visitors employs primary prevention by providing health education that promotes the physical and mental health and informs healthcare decisions, prevents diseases, and enhances the school performance<sup>(4,5)</sup>. The school health visitors are the key to improving the children and young people's health and welfare by delivering health promotion, providing preventive, and screening services, health advice, help with decision-making regarding the health, active treatment, education, family support, protection, safeguarding, service coordination and multi-agency work<sup>(6)</sup>. The National Association of school identifies seven core roles that the school nurse fulfills to foster child and adolescent health and educational success.<sup>(7,3)</sup>.

The role of the school health visitors including; provides direct care to students, leadership for the provision of health services, screening, and referral for health conditions promotes a healthy school atmosphere, provides health education. The school health visitor serves in a leadership role for health policies and programs and a liaison between school personnel, family, health care professionals, and the community. Additionally, the school health visitors work with community organizations and primary care physicians to form the community a healthy place for all children and their families<sup>(7,3)</sup>.

The school health visitor has a crucial role in the provision of comprehensive health services to children and youth. The school health visitors strives to promote health equity, assisting students and families in connecting with healthcare services, financial resources, shelter, food, and health promotion. This role encompasses responsibility for all students within the school community, and the school nurse is often the only healthcare professional aware of all the services and agencies involved in a student's care. So the aim of this study to evaluate the role of the school health visitors and students opinion regarding implementing of the school health program<sup>(8,3)</sup>.

**The aim of the study** was to evaluate the role of the school health visitors and students opinion regarding implementing of the school health program **Research question:** Are health visitors' activities and students opinions regarding the implementation of the school health program are effective?

## 2. MATERIALS AND METHOD

### Research design:

The descriptive study design was used in this study.

### Setting:

The study was conducted in the following settings: The school health visitors from different preparatory school in east and west at Tanta city. Also, for the students, the classes of the first and second academic years at four preparatory schools, two urban schools and two rural schools were selected to conduct this study.

### Subjects:

The study involved all available school health visitors which constituted 62 which were taken from different schools represented in east and west educational directorates at Tanta city. Also, the study included 500 students who were randomly selected from four schools at first and second academic year of preparatory school in the previous settings within the academic year 2017-2018.

### Tools of data collection:

Three tools were used in this study.

### Tool I: Structured questionnaire sheet for nurses:

It was developed by the researchers based on booklets from Ministry of Health and Population - General Administration of Child Care School Year in collaboration with the World Health Organization - Guide to services provided to school students through school health clinics - August 2008, Part I and II<sup>(9)</sup>. It was summarized and concluded. It consisted of two parts:

## International Journal of Novel Research in Healthcare and Nursing

Vol. 5, Issue 2, pp: (221-235), Month: May - August 2018, Available at: [www.noveltyjournals.com](http://www.noveltyjournals.com)

**Part one:** Socio-demographic characteristics of the school health visitors such as age, sex, educational level, residence, and attendance of any conferences related to health activities.

### Part two:

#### A - Assess knowledge of the school health visitors regarding:

##### i - Comprehensive health examination which includes: -

a- Role of the school health visitors, pre-comprehensive health examination it includes: medical clinic, parents notification, measures for weight and height, and health record.

b- Role of the school health visitors, During the comprehensive health examination about any diseases, skin hair, body temperature, bottom column curvature physical examination, hearing strength, speak check, universal teeth examined and perform the medical analysis.

c- Role of the school health visitors, after the comprehensive health examination about: notification about the results of the examination.

##### ii- Preventive services; it include roles of the school health visitors regarding:

1- Prevention and control of communicable diseases; it includes the daily round on classrooms, discovers infectious diseases of the classes, review student absentees records, educating students about the benefits of vaccinations and register students who refuse to vaccinate.

2 - Emergency care and first aid, it includes clinic was equipped with suitable preparation for the first aid, a home phone number with the visitor and show seminars on health problems for students.

##### iii) School medical treatment services; it includes roles of the school health visitors regarding

the care for sick students, give some medications as analgesics in some cases as colic.

#### B- Assess the role of the school health visitors regarding health environment:

it includes the health visitor reported practice during daily follow up for the school playground, water sources, and bathrooms, garbage disposal, follow classes' furniture, the canteen.

#### C- Assess the role of the school health visitors regarding School health education services:

it includes questions about the presence of the school health visitors continuously throughout the school health day.

### Part three: - Assess the school health visitors knowledge regarding thenrole of the school in follow up of their activities which include;

Activate the role of medical services and the health insurance for employees and learners. The provision of necessary material and human resources for the health aspects., The presence of various means of publicizing various practices to take account of health matters, The establishment the concept of hygiene and activate it among the learners. Doing the means to prevent health risks and include specialists from the community and parents to provide health care.

### Scoring system:

#### The score for each item was calculated as follows:-

- The correct and Complete answer will be given a score (2).
- The correct and Incomplete answer will be given a score (1).
- The wrong and/or No answer will be given a score (zero).

#### The total level of school health visitor's knowledge will be scored as follows:

- Less than 60% will be considered "poor".
- From 60% to less than 75% will be considered "fair"
- From 75% and more will be considered "good"-

## International Journal of Novel Research in Healthcare and Nursing

Vol. 5, Issue 2, pp: (221-235), Month: May - August 2018, Available at: [www.noveltyjournals.com](http://www.noveltyjournals.com)

**Tool II: Opinions of the school health visitors** regarding the applications of school health services, the obstacles facing the health visitors' activities, training needs for them and the suggestion to improve their health care activities.

**Tool III: Structured questionnaire sheet for the students;** it was developed by the researchers based on booklets from Ministry of Health and Population in collaboration with the World Health Organization as previously mentioned <sup>(9)</sup>. It consisted of two parts.

**Part one:** Socio-demographic characteristics of students such as age, sex, educational level, and residence.

**Part two: - Students' opinions regarding the role of the school health visitors which includes;** as previously mentioned.

**Firstly: opinions of the students regarding the role of the school health visitors and School health services:-**

A- Comprehensive health screening includes:-

- a) Pre-comprehensive health examination
- b) During the comprehensive health examination
- c) After comprehensive health examination

B- Preventive services, it include; prevention and control of communicable diseases, emergency care and first aid, follow up students who need care, develop a plan for health education, record keeping.

C- School medical treatment services.

**Secondly: Opinions of the students regarding the school health environment.**

**Thirdly: - Opinions of the students regarding School health education services.**

### Method

The study was accomplished through the following steps:

- 1-An official permission to conduct the study was obtained from the responsible authorities.
- 2- School health visitors' and students' consent for participation in the study was obtained after explaining the aim and the nature of the study.
- 3-Ethical consideration: School health visitors' and students were informed about the confidentiality of the information obtained from them and nature of the study.
- 4-Content validity: tools of the study were tested for content validity by experts in the field of pediatrics and community health nursing. Modifications were carried out accordingly.
- 5- A pilot study was carried out before starting the data collection. It was done on a sample of 10% of School health visitors' and the students to test the clarity, visibility and applicability of the study tools and the required changes were done accordingly.
- 6- Development of the study tools: two tools were used for data collection.
- 7- Implementation of the study: each school health visitors' and student were interviewed by the researcher. The fieldwork was carried out through the academic year 2017- 2018. The time taken for filling each sheet ranged from 30-40 minutes that is depending upon the response of the nurses and students.

### Statistical analysis:

Data were collected, coded and organized into tables, and then analyzed using the statistical package for social science (SPSS 22). Descriptive measures, including frequency, percentage, arithmetic mean standard deviation and F test were presented. P value was statistically significant at level 0.05%.The estimated reliability coefficients were 0.87 that indicating a good level of internal consistency. **Rating score of experts:** 1=not relevant, 2=little relevant, 3=relevant, 4=very relevant.

### 3. RESULTS

Table (1): Distribution of studied school health visitors according to their socio-demographic characteristics

Socio-demographic characteristics	School health nurse (no= 62)	
	No.	%
<b>Age (years)</b>		
30 - <40	22	35.5
40 - <50	21	33.9
≥50	19	30.6
<b>Range</b>	30- 59	
<b>Mean± SD</b>	44.12±8.56	
<b>Years of experiences</b>		
<10	3	4.8
10- < 20	19	30.6
≥20	40	64.4
<b>Range</b>	6- 38	
<b>Mean± SD</b>	23.69±8.24	
<b>Level of education</b>		
Diploma	59	95.2
Institute of nursing	3	4.8
<b>Residence</b>		
- Urban	38	61
- Rural	24	39

Table (1) Socio-demographic characteristics of the health visitors. It was observed that the percentage of the health visitors nearly third in every level (33.5%, 33.9%, 30.6%) respectively for age between 30 to less than 40, 40 to less than 50 and more than 50 years, with Mean± SD (44.12±8.56). Also this table shows that nearly two-thirds of the studied sample (64.4%) had years of experience more than twenty years with Mean± SD (23.69±8.24), also this table shows that the majority of them (95.2 %) had diploma degree and 61% working in the urban school.

Table (2): Role of the school health visitors regarding the implementation of the comprehensive health examination activities

Levels of comprehensive health examination activities	School health visitors (no= 62)		t	P
	No	%		
<b>Pre-comprehensive health examination</b>				
Poor	6	9.7	32.7	0.000*
Faire	5	8.1		
Good	51	82.3		
<b>During the comprehensive health examination</b>				
Poor	4	6.5	46.74	0.000*
Faire	6	9.7		
Good	52	83.9		
<b>After comprehensive health examination</b>				
Poor	0	0.0	95.89	0.000*
Faire	8	12.9		
Good	54	87.1		

\* Significant or P < 0.05

Table (2): Role of the school health visitors regarding the implementation of the comprehensive health examination activities. It was observed that the majority (82.3%) of the school health visitors had good role pre-comprehensive health examination which including preparation the suitable place and the students. Also, observed that 83.9% of them had a good role during the comprehensive health examination which includes the personal history, observation of skin and hair, body temperature, vertebral column curvature, examination of vision, hearing, speak check, teeth examination and perform laboratory investigations. Most of them 87.1% of them had a good role after comprehensive health examination which includes recording the diagnosis, register the pathological cases, notify students and parents about the results of the examination and follow up the cases with a significant difference p-value < 0.000.

Table (3): Role of the school health visitors regarding the preventive services

Levels of preventive services	School health visitors (no= 62)		t	P
	No	%		
<b>Prevention and control of communicable diseases</b>				
Poor	3	4.8	<b>57.25</b>	<b>0.000*</b>
Faire	4	6.5		
Good	55	88.7		
<b>Emergency care and first aid</b>				
Poor	11	17.7	<b>26.20</b>	<b>0.000*</b>
Faire	13	21.0		
Good	38	61.3		
<b>Follow up students who need care</b>				
Poor	6	9.7	<b>44.18</b>	<b>0.000*</b>
Faire	7	11.3		
Good	49	79.0		
<b>Develop a plan for health education</b>				
Poor	8	12.9	<b>21.06</b>	<b>0.000*</b>
Faire	1	1.6		
Good	53	85.5		
<b>Record keeping</b>				
Poor	3	4.8	<b>61.5</b>	<b>0.000*</b>
Faire	0	0.0		
Good	59	95.2		
<b>Complete student health record</b>				
Poor	5	8.1	<b>26.37</b>	<b>0.000*</b>
Faire	0	0.0		
Good	57	91.9		
<b>Reviewing of the medical record written by the doctor</b>				
Poor	8	12.9	<b>21.06</b>	<b>0.000*</b>
Faire	1	1.6		
Good	53	85.5		

\* Significant or P < 0.05

**Table (3) Role of the school health visitors regarding the preventive services.** The table illustrates that the majority of them (95.2%) had a good reported practice about the record keeping followed by 91.9% complete student health record. Also observed that 85.5% of them had good reported practice regarding both develop plan of health education and reviewing the medical record written by doctors. Also, this table shows that 88.7% of them had a good reported practice regarding the prevention and control of communicable diseases, reduced to 79.0% regarding follow up the students who need care and continue to reduce to 61.3% regarding the emergency care and first aid. There was a statistically significant difference with p-value < 0.000.

Table (4): Levels of implementing the school health visitors' activities

School activities to follow health	School health visitors (no= 62)		t	P
	No	%		
<b>Comprehensive health screening</b>				
Poor	3	4.8	<b>58.21</b>	<b>0.000*</b>
Faire	9	14.5		
Good	50	80.6		
<b>Preventive services</b>				
Poor	4	6.5	<b>87.30</b>	<b>0.000*</b>
Faire	0	0.0		
Good	58	93.5		

<b>School medical treatment services</b>				
Poor	2	3.2	<b>64.23</b>	<b>0.000*</b>
Faire	25	40.3		
Good	35	56.5		
<b>School rehabilitation services</b>				
Poor	17	27.4	<b>54.23</b>	<b>0.000*</b>
Faire	4	6.5		
Good	41	66.1		

\* Significant or P < 0.05

**Table (4): Levels of implementing the school health visitors' activities.** it was reported by most (93.5%) of school health visitors that they had a good level of implementing the preventive services which includes checking the students for communicable disease and vaccinations and 80.6% regarding comprehensive health screening reduced to 66.1% and 56.5% reported good level regarding rehabilitation services and the school medical treatment services respectively with a significant differences ( p= 0.000).

**Table (5): Distribution of opinions of the school health visitors to improve their health activities**

Opinion of the school health nurse	School health visitors (no=62)	
	No	%
<b>Applications of the school health activities.</b>		
-Yes	30	48.4
-No	16	25.8
-Sometimes	16	25.8
<b>Training needs.</b>		
-Yes	33	53.2
-No	10	16.1
-Sometimes	19	30.6
<b>Obstacles facing their tasks.</b>		
- School overcrowded with students	62	100
- Students don't have a health record.	45	72.6
- Little advanced resources.	62	100
- Little workers in school.	62	100
- Little parents awareness and participation.	60	96.7
<b>Suggestions to improve their health activities.</b>		
- Presence of doctor during the school day.	62	100
- Posters, booklet, and CD for student education.	62	100
- Presence of psychologist for students.	62	100
- Regular check for school infrastructure.	62	100

**Table (5) Distribution of the opinions of the school health visitors to improve their health activities.** The table shows that about half (48.4%) of the studied nurses emphasize that they applicate all previously mentioned health activities for students according to the available resources. Also, all of them (100%) mentioned that the presence of certain obstacles to performing their tasks as little advanced resources, little workers or cleaner in the schools respectively. Regarding the need for training about half of them (53.2%) need continuous training. All of them had certain suggestions for the problems facing them as the presence of a doctor during the school day, posters, booklet, and CD for students' education, the presence of psychologist for students and regular check for school infrastructure respectively.

**Table (6): Distribution of school health visitors according to their reported practice of the school health activities for students**

School health activities	Yes		Sometimes		No	
	No.	%	No.	%	No.	%
<b>1- Medical services</b>						
<b>Availability of health insurance reports</b>	40	64.5	20	32.3	2	3.2
<b>Communication channels with the health unit/ hospital</b>	50	80.6	5	8.1	7	11.3
<b>Periodic examination of the students.</b>	32	51.6	12	19.4	18	29.0

Maintain of students health care records	28	45.2	16	25.8	18	29.0
<b>2-Material and human resources</b>						
Training school health nurses	45	72.6	17	27.4	0	0.0
Material resources for emergency	28	45.2	16	25.8	18	29.0
Daily present of health visitor	18	29.0	12	19.4	32	51.6
<b>3-publicizing various practices</b>						
The school prepares posters and leaflets	18	29.0	12	19.4	32	51.6
Website for the school	28	45.2	16	25.8	18	29.0
Students committee in the school	32	51.6	12	19.4	18	29.0
<b>4-health guidelines</b>						
Perform conference for health guidance.	46	74.2	0	0.0	16	25.8
Students participate in cleaning the school	45	72.6	5	8.1	12	19.3
Strategic plan involves students in applications of school activities.	50	80.6	2	3.2	10	16.1
<b>5-Measures</b>						
The school uses simulation for training.	18	29.0	12	19.4	32	51.6
The school publishes leaflets and posters Guide students to face health risks	32	51.6	12	19.4	18	29.0
<b>6-Parent and community participation.</b>						
Database of parents working in the field of health	10	16.1	43	69.4	9	14.5
Attract the community members who work in the field of health	18	29.0	12	19.4	32	51.6
The school plans to use them according to the time available	12	19.4	20	32.2	30	48.4

**Table (6) Distribution of school health visitors according to their reported practice of the school health activities for students.** It was reported from the school health visitors that they agreed with 64.5% that school manager keens on the availability of health insurance records for students and employees. Also, most of them (80.6%) approved with an availability of the school manager to establish communication channels with health units or hospitals near to the school. Nearly half of them (51.6%) agreed that the school perform the periodic examination for the students' health status & employee, decreased to 45.2% agreed that the ability of the school to save the healthcare records for students and employees.

Regarding the human and materials resources of the school. It was observed that 72.6% agreed that the school trained all members of the school community to practice first aid in case of emergency, percent reduced to 45.2%, and 29% regarding the maintenance resources for an emergency situation and the presence of the health visitors permanently at school respectively. Regarding preparation for the poster, the presence of website and students' committee, the percent fluctuated between 29.0%, 45.2% and 51.6% respectively agreed that the school performed these activities. Also regarding holding the seminar, encouraging students' participation in the school cleaning and going for students in classroom, 74.2%, 72.6%, and 80.6% respectively agreed that the school performed those activities.

As regard to the measures of the school health risks, only 29.0% of them agreed that the school made a simulation for training of their students and 51.6% agreed that the school publishes leaflets and poster for guidance about risks facing children. As regarding sharing parents and community members. It was observed that 16.1%, 29.0%, and 19.4% agreed that the school had a database about the parents who work in the field of health, attract community members who work in the field of health and the school plan to benefit from their positions.

**Table (7): Distribution of the school health visitors' knowledge regarding the levels of the school activities to follow up the health of school-age children**

Levels of school activities	School health visitors (no= 62)		t	P
	No	%		
Activities of the school to provide the medical services and the health insurance for employees and learners				
Poor				
Faire	5	8.1	<b>43.08</b>	<b>0.000*</b>
Good	9	14.5		
	48	77.4		



<b>Availability of necessary material and human resources for the health aspects of the students.</b>				
Poor	15	24.2	<b>21.62</b>	<b>0.000*</b>
Faire	17	27.4		
Good	30	48.4		
<b>Publication of various health practices.</b>				
Poor	20	32.3	<b>15.19</b>	<b>0.000*</b>
Faire	16	25.8		
Good	26	41.9		
<b>Activities to stabilize the concept of hygiene and activate it among the learners</b>				
Poor	10	16.1	<b>26.67</b>	<b>0.000*</b>
Faire	23	37.1		
Good	29	46.8		
<b>Measures used to prevent the health risks among the school</b>				
Poor			<b>19.28</b>	<b>0.000*</b>
Faire	14	22.6		
Good	0	0.0		
	48	77.4		
<b>Activities of the school to use the specialists from the community and parents to provide health care</b>				
Poor	33	53.2	<b>11.28</b>	<b>0.000*</b>
Faire	7	11.3		
Good	22	35.5		

\* Significant or  $P < 0.05$

**Table (7): Distribution of the school health visitors' knowledge regarding the levels of the school activities to follow up the health of school-age children.** It was observed that the same result of 77.4% of the school health visitors who mentioned that the school health activities to provide the medical services and the health insurance for employees and learners and the measures used to prevent the health risks among the school, decreased to 48.4%, 41.9%, 46.8% & 35.5% regarding the availability of necessary material and human resources for the students, publication of various school practices, activities of hygienic care for the students and cooperation between the school, the parents and community members respectively with significant difference ( $p = 0.000$ ).

**Table (8): Correlation of the total levels of activities of the school to follow up the health and the total levels of activities of the school health visitors**

Total levels of activities of the school health visitors	Total levels of activities of the school to follow up the health of the school-age children			
	Poor	Fair	Good	Total
<b>Poor</b>	5	0	0	5
<b>Faire</b>	2	8	2	12
<b>Good</b>	6	2	37	45
<b>Total</b>	13	10	39	<b>62</b>
<b>F</b>	<b>47.29</b>			
<b>P</b>	<b>0.001*</b>			

\* Significant or  $P < 0.05$

**Table (8) Correlation of the total levels of the activities of the school and the total level of activities of the school health visitors.** The table presents that less than half of them (45%) had a good score for their activities compared with the school health resources and activities. with significant differences  $p$ -value  $< 0.001$ .

Table (9): Distribution of studied students according to their socio-demographic characteristics

Socio-demographic characteristics	Studied students (no= 500)	
	No	%
<b>Age (years)</b>		
11	5	1.0
12	115	23.0
13	324	64.8
14	56	11.2
<b>Grade</b>		
First	439	87.8
Second	61	12.2
<b>School</b>		
Mohamed Abou Zahra	100	20.0
Taha Hussien	75	15.0
Hiyatem	175	35.0
Mostafa Al Damati	150	30.0

Table (9): Distribution of the studied students according to their socio-demographic characteristics. It was observed that nearly two-thirds of the studied children (64.8) had age 13 years, regarding school setting, it was noted that 35% of them from the urban area and 65% of them from rural area (fig.1). Also regarding the student's grade, it was noted that most of them at first grade.

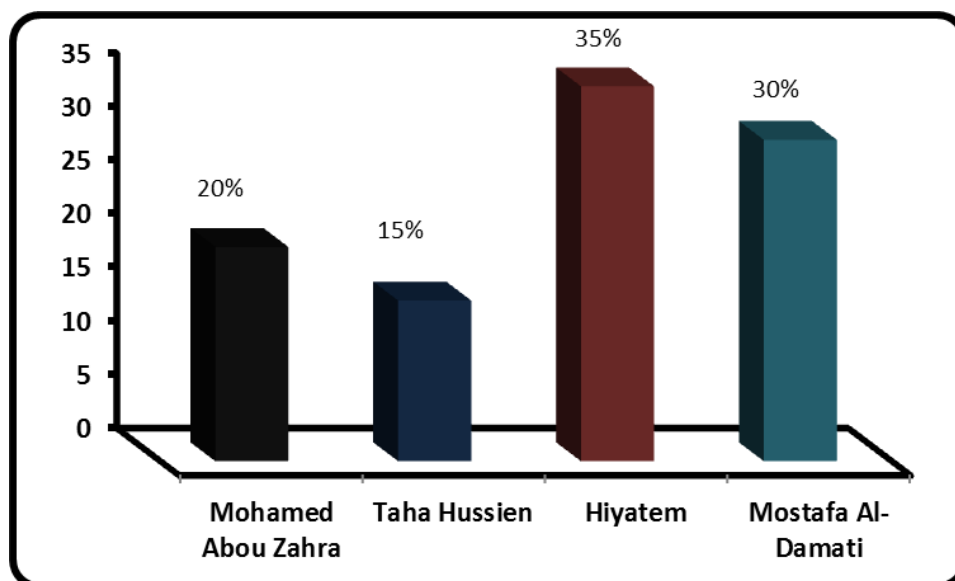


Fig (1): Distribution of studied students according to their school

Table (10): Distribution of studied students according to their opinions regarding the levels of comprehensive health examination activities

Levels of comprehensive health examination activities	Studied students (no= 500)		t	P
	No	%		
<b>Pre-comprehensive health examination</b>				
Poor	54	10.8	<b>35.6</b>	<b>0.001*</b>
Faire	204	40.8		
Good	242	48.4		

<b>During the comprehensive health examination</b>				
Poor	86	17.2	<b>38.7</b>	<b>0.010*</b>
Faire	161	32.2		
Good	253	50.6		
<b>After comprehensive health examination</b>				
Poor	100	20.0	<b>39.87</b>	<b>0.010*</b>
Faire	141	28.2		
Good	259	51.8		

\* Significant or P < 0.05

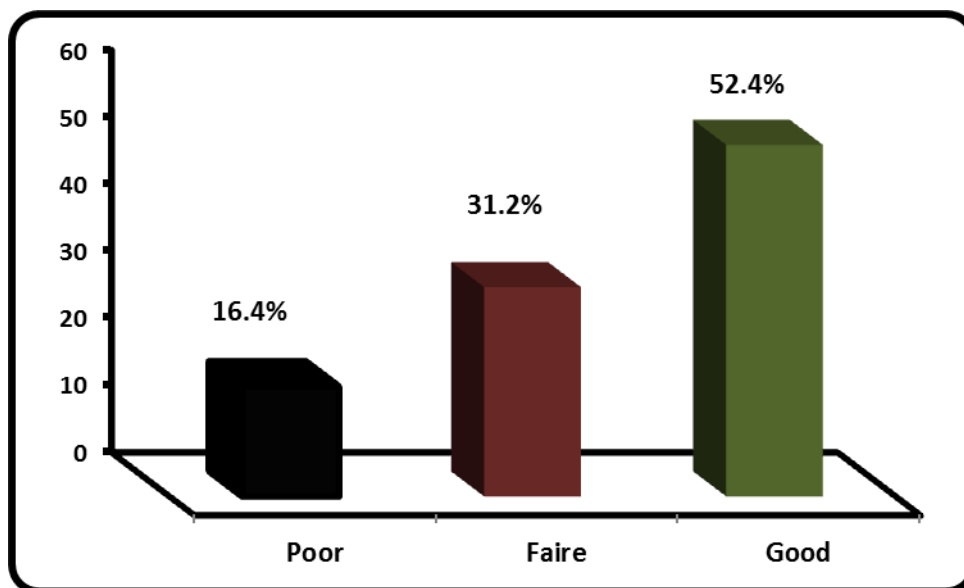
**Table (10): Distribution of studied students according to their opinions regarding the levels of comprehensive health examination activities.** The table illustrates that about half of them (48.4%, 50.6%, and 52.8%) reported a good level regarding pre, during and after health examination services respectively.

**Table (11): Distribution of studied students according to their opinions regarding the levels of preventive services**

Levels of preventive services	Studied students (no= 500)		t	P
	No	%		
<b>Prevention and control of communicable diseases</b>				
Poor	83	16.6	<b>42.13</b>	<b>0.001*</b>
Faire	187	37.4		
Good	230	46.0		
<b>Emergency care and first aid</b>				
Poor	80	16.0	<b>23.46</b>	<b>0.012*</b>
Faire	199	39.8		
Good	221	44.2		

\* Significant or P < 0.05

**Table (11): Distribution of the studied students according to their opinions regarding the levels of preventive services.** It was observed that less than half of them (46.0%, 44.2%) reported a good score regarding levels of preventive services including; prevention and control of communicable diseases and Emergency care and first aid respectively



**Fig (2): Distribution of studied students according to their opinions regarding the levels of school medical treatment services**

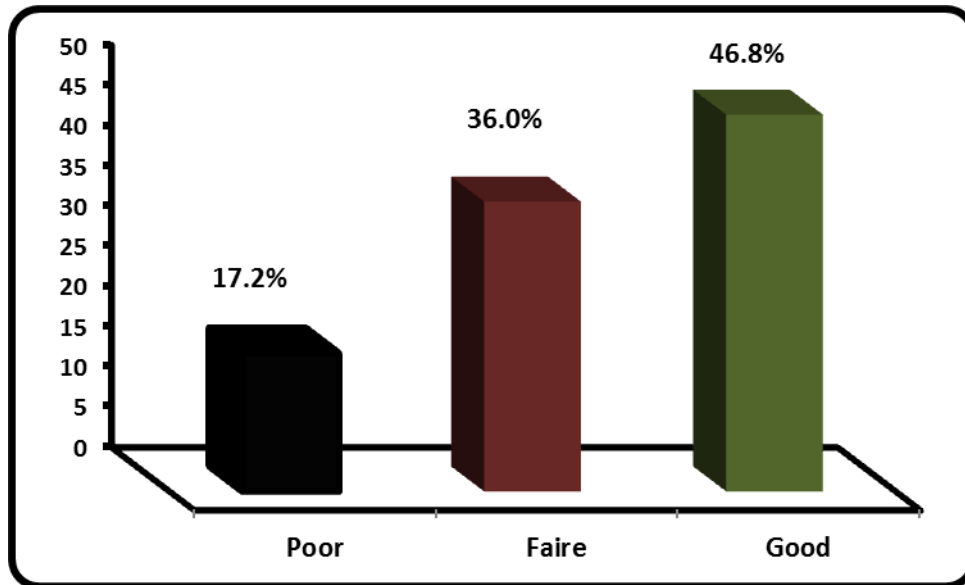


Fig (3): Distribution of studied students according to their opinions regarding the total levels of school health services

Figure (2, 3): Distribution of studied students according to their opinion regarding the levels of school medical treatment services and the total levels of school health services. It was noted that nearly half of them (52.4%, 46.8%) reported good score regarding the medical treatment and school health services respectively.

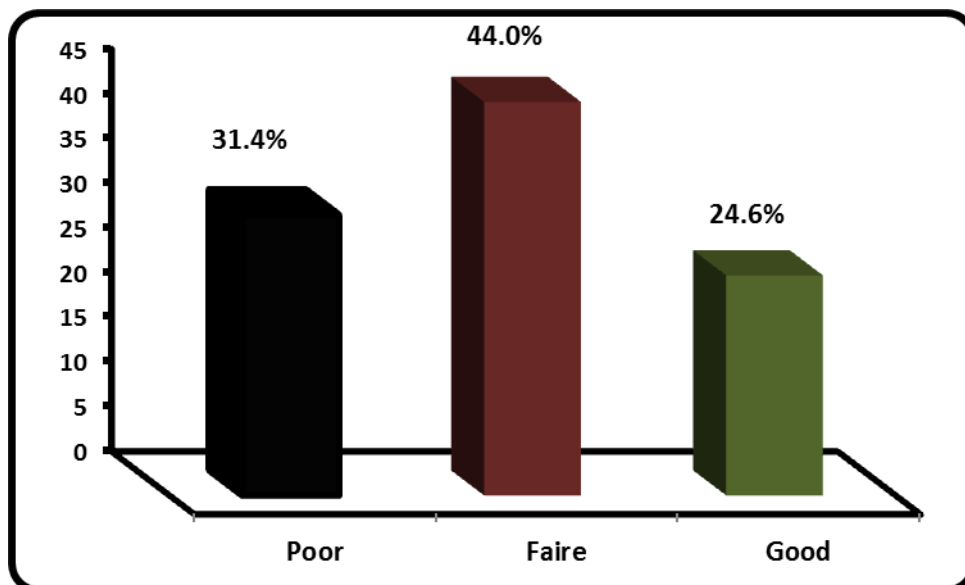


Fig (4): Distribution of studied students according to their opinions regarding the total levels of school health environment

Fig (4): Distribution of studied students according to their assessment regarding the total levels of school health environment, it was observed that less than half (44.0%) of them had fair score regarding the school health environment.

#### 4. DISCUSSION

In Egypt (2014) it was reported by Administrative data indicates continued growth in preparatory education levels, whether in the number of public schools, private schools or Al-Azhar institutes. The rate of increase across all schools during the last five years reached 13 percent, which is slightly less than the rate of increase in the number of students (14 percent). In the present study nearly two-thirds of the studied children had age 13 years and at first grade of preparatory school, it may be due to fear of the first grade students to absent from the school and the teacher may decrease their score and the students at third don't go to school from the first day, because no present any continuous evaluation is formative

at the end of academic year. This study supported by **Masogo G. (2015)**<sup>(12)</sup>, who highlights the significant associations between the student background factors, poor attendance, and early school leaving. Regarding the student setting, the present study revealed that about two-thirds of the students from the rural area, it may be attributed to the effect of teacher performance in a rural area and their effective authority and responsibility to obligate children to go to school regularly. This result agrees with **Preston J. (2006)**<sup>(13)</sup>, who stated that the dynamics of the rural schools, teachers are better able to integrate curriculum concepts across multiple subjects. Overall, teachers in rural schools are able to give their students more attention, are more aware of each student's talents and need, and are better able to integrate subject areas.

In the present study, the health visitors' age increased with mean  $\pm$  SD (44.12 $\pm$ 8.56), it may be due to a little number of nurses assigned to work in the school. This is congruent with the findings of **Farrag S. (2013)**<sup>(10)</sup>, who stated that the school nursing, often incorporates nurses with either pediatric or community nursing backgrounds more than three-quarter of them (76.9%) with age 41-50, all of them female and diploma degree. Also **McDermid, Peters, Jackson & Daly (2012)**<sup>(14)</sup>, who reported that the shortage of nurses has reached a crisis point for health services internationally and this shortage has repercussions for the next generation of nurses this means that there will be workforce shortage and this holds implications for development of nursing research and continued practice development.

The results of the present study showed that about half of the students reported good performance regarding pre, during and after school health examination services. It may be due to the most of students in the first grade and perform certain examination at the beginning of the first year and remain to remember it, this is agrees with **Kantek F. (2015)**,<sup>(15)</sup> who reported that the participants students' mean scores of school culture scale subcategories are generally distributed around median scores. This finding can be interpreted in a way that students' perception of school culture is not clear yet.

It was observed in the present study that less than half of the students mentioned good assessment regarding the levels of preventive services which included the prevention and control of the communicable diseases and emergency care and the first aid which provided by the school, this low level may be attributed to little communication between students and the school health visitors during emergency situations. This study goes in the line with **Safadi et al. (2011)**<sup>(16)</sup>, who investigated the students' perception of nursing at the beginning of the nursing program showed that the students had idealistic views of the profession with concepts of caring, compassion and nurturing but after the exposure to clinical experiences it shifted towards it being more of technical, documentation and procedural skills.

National Association of School Nurses (NASN), 2017 and American Academy of Pediatrics (2016). Reported that in developed countries, the role of school nurses has become more comprehensive. They ensure the students are healthy, safe and ready to learn they achieve this by intervening with health problems, providing health education, ensuring a healthy learning environment and managing chronic illnesses. In the present study, it was observed that most of the school health visitors reported a good implementation of the comprehensive health examination of the students. It can be supported by **Ali F. and Hassani R. (2017)**<sup>(17)</sup>, who reported that the role of the school nurse has become comprehensive; it is no longer restricted to the provision of healthcare. It is more about advancing the well-being and educational achievement of students. Predominantly meeting the healthcare needs of students and staff, provide direct health care to students and staff, especially managing medications and keeping medical records and organize health programs and coordinate surveillance of infectious diseases. "Maintaining the required medications, students, teachers, and workers' medical history provide medical treatment and health education".

In the present study, it was observed that more than three-quarter of the school health visitors had good knowledge about activities of the school to performing the role of the medical services and the health insurance for employees and learners. This result congruent with Ministry of Health and Population (2017)<sup>(18)</sup>, which reported that In Egypt, both school children and pre-school children are covered by Health Insurance Organization (HIO) insurance. Children 18 years of age or less are covered by HIO insurance if they are registered in school. All chronic diseases, hospitalization, medical examinations, and immunizations are covered, except outpatient visits due to acute diseases. In the case of an acute outpatient visit, one-third is covered by the patient and the rest is covered by insurance. Immunizations are provided to school children and medical check-ups are provided to pre-school children, children in primary school(1st and 4th grades), secondary school (1<sup>st</sup> year) and high school (1<sup>st</sup> year), with chest, eye, and dental services provided by school doctors. Health promotion is also covered for pre-school children.

In the present study, it was observed that less than half of the school health visitors had good knowledge regarding the necessary material and human resources for the health aspects among the school, this result congruent with (Anjum M.

## International Journal of Novel Research in Healthcare and Nursing

Vol. 5, Issue 2, pp: (221-235), Month: May - August 2018, Available at: [www.noveltyjournals.com](http://www.noveltyjournals.com)

2016),<sup>(19)</sup> who reported that after evaluation of the school health knowledge and psychomotor skills, observed low level of knowledge and effective practice and concluded that we came to know that attention must be paid on practical learning skills and Theoretical knowledge should be approved as well as this will also increase the psychomotor skills.

All the school health visitors in the present stated the presence of certain obstacles to perform their tasks as little advanced resources, little workers or cleaners in the schools, absence of a doctor during the school day, posters, booklet and CD for students' education absence of psychologist for students and regular check for school infrastructure. This result is congruent with **Beverley A. (2016)**,<sup>(20)</sup> who reported that the school nurses indicated that they are short on educational resources, finances to access resources, and human resources to deliver education use old or outdated resources, most school nurses identified that they make their own resources and the tools for teaching. School nurses stated that they are in need of health education resources like the e-Bug resources developed by Public Health England, and some described the need for standardized resources among teams or regions.

### 5. CONCLUSION

It can be concluded that the students were not satisfied with health care visitors activities despite they have taken many training, the health visitors had knowledge but their performance was not effective, also the school health activities need close observation from the health authority.

### 6. RECOMMENDATION

Based on the results of this study, the following recommendations are suggested:

Training of the school health visitors on specific school health activities recommended by Ministry of health.

### REFERENCES

- [1] UNICEF, Egypt Country Report On Out –Of- School. The Middle East and North Africa Regional Office. © 2015
- [2] Marc H. Bornstein, Yuko Nonoyama-Tarumi, Yumiko Ota, Oliver Petrovic, and Diane L. Putnick Child Development in Developing Countries: Introduction and Methods. Us National Library of medicine. National Institutes of Health. 2012; 83(1): 16–31.
- [3] American Academy of Pediatrics. Role of the School Nurse in Providing School Health Services. Downloaded from <http://pediatrics.aappublications.org/> by guest on December 9, 2017
- [4] Edwards A., Cathy S. and Katie R .Nursing in schools: How school nurses support pupils with long-term health conditions. National Children's Bureau. 8 Wakley Street. London, 2016.
- [5] Spring S. Role of the 21st Century School Nurse. National Association of School Nurses. 2016.
- [6] Beverley A. Vicki L. Charlotte V. and Meredith K. \* School Nurses' perspectives on the role of the school nurse in health education and health promotion in England: a qualitative study.. Bio Med Central Nursing. National Center for Biotechnology Information, U.S. National Library of medicine (2016) 15:73.
- [7] National Association of School Nurses. (2014). Position statement: School nurse role in electronic health records. Retrieved March 20, 2017 from <http://www.nasn.org/PolicyAdvocacy/PositionPapersandReports/NASNPositionStatementsFullView/tabid/462/ArticleId/641/Electronic-School-Health-Records-School-Nurse-Role-in-Adopted-January-2014>.
- [8] Regina LT .The role of school nurses in delivering accessible health services for primary and secondary school students in Hong Kong. National Library of medicine. National Institutes of Health. Journal of Clinical Nursing. 2011
- [9] Ministry of Health and Population - General Administration of Child Care School Year in collaboration with the World Health Organization - Guide to services provided to school students through school health clinics - August 2008 Part I and II.
- [10] Farrag S., and Hayter M., RN1,3A Qualitative Study of Egyptian .School Nurses' Attitudes and Experiences Toward Sex and Relationship Education. Ph.D., Pennsylvania State Univ. 2016.

**International Journal of Novel Research in Healthcare and Nursing**

 Vol. 5, Issue 2, pp: (221-235), Month: May - August 2018, Available at: [www.noveltyjournals.com](http://www.noveltyjournals.com)

- [11] Bosede A. Emiloju A. Rural and Urban Differential in Student's Academic Performance among Secondary School Students In Ondo State, Nigeria, Journal of Educational and Social Research. 2013; 3(3).
- [12] Masogo G. Causes of Student Absenteeism: A survey of Four Lobatse Junior Secondary Schools in Botswana. University of Botswana. Degree of Master of education.2015.
- [13] Preston J. Rural and Urban teaching experiences of Eight Praire teachers Masters of Education In the Department of Curriculum Studies University of Saskatchewan 2006.
- [14] McDermid F , Peters K, Jackson D, Daly J. Factors contributing to the shortage of nurse faculty: a review of the literature. Nurse Educ Today. 2012; 32(5):565-9. doi: 10.1016/j.nedt.2012.01.011. Epub 2012 Feb 13. School of Nursing and Midwifery, University of Western Sydney, Penrith, NSW, Australia. F.mcdermid@uws.edu.au
- [15] Kanteka F., Ulku Baykalb , Serap Altuntasc . Culture of nursing school: students' perceptions. Science Direct. Procedia - Social and Behavioral Sciences ( 2015 ) 174: 1207 – 1213.
- [16] Safadi R.R., Saleh M.Y.N., Nassar O.S., Amre H.M. & Froelicher E.S. Nursing students' perceptions of nursing: a descriptive study of four cohorts. International Nursing Review. 2011.
- [17] Ali F. Hassani R. An explanstion of school nurse role in secondary girls schools in Bahrain International Journal of Health and Life-Sciences. 2017; 3(1):12 – 17.
- [18] Health Sector Cooperation Planing Survay In Arabic Republic Of Egypt Final Report. Ministry of Health and Population Egyptian Ambulance Organization. March 2017.
- [19] Anjum M., Khan M. and et al. Evaluation of Knowledge and Psychomotor Skills of Lady Health Visitors about Immunization.