

Role of the School Nurse as perceived by school children' Parent in Jeddah

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Abstract

*Descriptive research design was used to determine the school nurse role as perceived by the school children' parents in Jeddah. A convenience sample was recruited for the study. The estimated number was 200 school children' parents living in Jeddah. The study was conducted at different public places in Jeddah. The study questionnaire included three parts, first, Socio demographic data, second, a list of responsibilities of school nurse classified according to the school health program components and third, open ended questions regarding the most important responsibility of the school nurse and the most important health education topic as perceived by the parents. **The results of this study revealed that 82.5 % of the study subjects were mothers. The majority of schools don't have school nurse and 6 % have a school nurse and all the parents prefer hiring a school nurse for their children schools. Regarding the most important responsibility of the school nurse as perceived by the parents, screening was considered her first responsibility by nearly a quarter of parents, while 22 % of the parents agreed that prevention and control of communicable diseases was the first important health education topic. **Recommendation:** The Ministry of Education should recruit a nurse for each school with at least a higher nursing gradation and provide her with enough equipment and facilities.***

Introduction

Along the family, schools can be considered the major organization for providing the education and skills that enable the school children to fulfill their roles as healthy citizens. ^(1,2)

There is a wide disparity in implementation of the components of school health, some nations depend on three elements which are health education, health services, healthful school environment. However developed countries have expanded the possibility to include health promotion of school community, food safety and nutrition, school-community projects, recreation and physical education, mental health, and counseling and social support.⁽³⁻⁶⁾

In the year 1987, the CDC (Center for Diseases Control and Prevention) was the first that suggested the idea of a coordinated school health program. The coordinated school health programs consist of eight distinct but interrelated elements. Many of these elements exist in each school, but they are often not properly related in a coordinated way. Active community and family involvement is essential in the achievement of coordinated school health program. Furthermore, in recent years, the concept of a "Health-Promoting School" has established much concern. The aim of WHO's Global School Health Initiative is to maximize the number of schools that can actually be called "Health-Promoting Schools (HPS)". Although definitions will vary, depending on need and circumstance, a Health-Promoting School can be characterized as a school constantly strengthening its capacity as a healthy location for learning, living and working.^(4,7,8)

The range of school health services differs by school nature. The following health services are the lowest that should be presented, according to the American Academy of Pediatrics (AAP) manual: to assess the health complaints, to administer drugs, and meet the needs of school children with special conditions; establish system for managing disasters and critical situations; mandate screening programs, verify immunizations, and report infectious disease; and identify and manage school children' chronic health care needs that affect their educational success. The nurse in school helps as an extension of usual community health services, safeguarding continuity, compliance, and professional supervision of school care.⁽⁹⁾

In Saudi Arabia, the department of school health care was established in the year 1964 to provide medical services for school children, teachers and all the staff of Ministry of Education.^(2,8,10)

The nurse of school is a vital participant of the school health team that act as leader toward health and work in partnership with members of school, parents and societ members to keep school children healthy and safe in schools so that learning can take place unhindered. School nursing was defined as "A specialized practice of professional nursing that advances the well-being, academic success, and lifelong achievement of school children". Finally, school nurses facilitate positive student responses to normal growth and development; promote their health and safety; intervene with their actual and potential health conditions; provide services for case management; and actively collaborate with others to build student and family capacity for adaptation, selfmanagement, self-advocacy, and education.^(3,9)

Several studies were done to assess the perception of parents, administrators and school children about the role of school nurse, as this perception affects their coordination and involvement in the school health activities.^(3,5,11,12) A limited number of these studies were performed in Arab countries in general and in Saudi Arabia in particular/or specifically in Saudia Arabia.^(2,10,13) Therefore, the study aims to highlight the parents perception of the role of the school nurse in Jeddah city.

Aim of the study

To determine the school nurse role as perceived by the school children' parents in Jeddah

Materials & Methods

The study was conducted at different public places in Jeddah city: Shopping malls; Aziz mall, Red Sea mall, Al-Arab mall and Al-Andalus mall in Jeddah city, Saudi Arabia

Study Subjects

A convenience sample was recruited for the study. The estimated number was 200 school children's parents living in Jeddah.

Inclusion Criteria:

- Living in Jeddah city.
- Either a mother or a father,
- Parent of school children in different level of education: primary, preparatory or secondary.
- willing to participate in the study

Study Design:

Descriptive research design was used to conduct this study.

Sample Size:

The total number of participants was 200 parents.

Sampling Technique:

Non probability- convenience sampling technique was used for this study.

Data collection of data:

An interview was carried out for the purpose of orientation of each participant regarding the objectives, content and confidentiality of data. Each participant in the study signed their consent then completed the questionnaire. It took about 10-15 minutes to complete one questionnaire. After completion, the parents returned the completed questionnaire to the researchers. Then after gathering the entire completed questionnaire, data was coded and prepared for analysis instruments.

Instruments

The study questionnaire included three parts:

A structured self-report data collection method was applied. A structured questionnaire was used. The questionnaire was developed for the purposes of this study. The questionnaire consisted of two sections:

1. Section A: Socio- demographic data will be obtained to include: age, academic level, marital status, number of children, types of school.
2. Section B: list of responsibilities of a/the school nurse classified according to the components of school health program
3. Section C: Open end question related to the most important role performed by school nurse and the most important health education topic

- The study questionnaires were submitted to four experts' panels in the field of the study from KSAUHS, the College of Nursing-Jeddah, for its content validity. Accordingly, the necessary modification was done.
- Consequently, a/the pilot study was carried out on 20 parents, in order to confirm applicability, simplicity of questionnaires and to assessment of the amount of time needed to complete/fill in the questionnaires. Accordingly, based on their opinions a few statements were rephrased.
- The reliability (i.e., internal consistency) will be examined using Cronbach's Alpha after actual data collection. It was calculated using the SPSS and it was found equal to 0.928.

Data management

All data were explored using SPSS for windows (version11.5). Mean ± SD were calculated for Continuous variables.

Ethical consideration: Participant signed an informed consent to participate in the study; there was no risk in dealing with human subjects. Student’s identification was coded and kept in locked files. No one had access to the data except the investigators. Data was presented in aggregated format, so student’s identification would be secured. No other ethical issues were of concern. The study was presented to "College of Nursing Research Committee” for approval. The study was conducted after receiving” CON-RC Approval").

Results: Table 1: Demographic Characteristics of the studied sample

Variables			frequency	Percent
<i>Parents</i>	Father		35	17.5
	Mother		165	82.5
<i>Education</i>	Father	primary	27	13.5
		preparatory	17	8.5
		secondary	46	23.0
		university	110	55.0
	Mother	primary	13	6.5
		preparatory	16	8.0
		secondary	62	31.0
		university	109	54.5
<i>Work</i>	father	professional	138	69.0
		Non professional	60	30.0
		Not working	2	1.0
	mother	professional	88	44.0
		Non professional	49	24.5
		House wife	63	31.5
<i>Number of School children</i>	Less than 3		122	61.0
	3-6		68	34.0
	More than 6		10	5.0
<i>School type</i>	governmental		152	76
	Non-governmental		50	25
	private		13	6.5

Table 1 illustrates the socio demographic data of the parent’s sample. It was found that 82.5 % of the study subjects were mothers. Regarding their educational level, more than half of fathers and mothers were university educated. 69% of fathers and 44% of mother were professional workers. 61% of parents had more than 3 children, while 34% had from 3 to 6 children and 5% had more than 6 children. In regard to the school which their children were enrolled 76 % of them were in governmental school, 25% in nongovernmental school and 6.5 % were in private schools.

Table (2) The availability and the qualifications of the school nurse as perceived by the parent

Variables		Frequency	percent
Availability of school nurse	Yes	12	6.0
	No	166	83.0
	Do not know	22	11.0
Prefer school nurse	Yes	200	100
Reasons	Student safety	67	33.5
	Prevent diseases	34	17.0
	First aid	49	24.5
	Treat minor medical condition	50	25.0
School nurse qualification	BSC	85	42.5
	Diploma School Health	115	57.0

Table 2 illustrates the availability and qualifications of the school nurse as perceived by the parent. The majority of schools didn't have a school nurse, 6 % had a school nurse and 11 % didn't know if there was school nurse or not. All the parents had a preference for hiring a school nurse in their childrens' schools. 33.5% of parents preferred having a school nurse for student safety reasons,25% for treating minor medical conditions,24.5 % for first aid reasons and 17 % for disease prevention. Regarding the school nurse's qualifications, 57.0 % selected the option of post graduate diploma in school health and 42.5 % selected the option of BSC nursing degree.

Table (3) Role of school nurse as perceived by the parents

variables	Not important		Partial important		Important		Very important	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
a- School health services								
Screening	0	0%	5	2.5 %	36	18.0 %	159	79.5%
Preventive	0	0 %	9	4.5 %	53	26.5%	138	69.0%
Curative	0	0%	2	1.0%	43	21.5%	155	77.5%
Special needs	0	0%	13	6.5%	56	28.0%	131	65.5%
b- Healthy environment								
Ensure availability of safety measures	6	3.0%	16	8.0%	55	27.5%	123	61.5%
Fire protection measures	4	2.0%	14	7.0%	52	26.0%	130	65.0%
Ensure healthy environment for school children and staff	5	2.5%	17	8.5%	62	31.0%	161	58.0%
c- Health education								
Health education session for the school children	7	3.5%	17	8.5%	57	28.5%	119	59.5%

Health education session for parents	1	.5%	34	17.0%	74	37.0%	91	45.5%
Development of health education materials	2	1.0%	43	21.5%	73	36.5%	83	41.0%

Table 3 indicates the most important responsibilities mentioned by the parents. School health services including screening and curative services (79.5% and 77.5%) were considered of high importance. Regarding her role in maintaining a healthy school environment, the implementation of fire protection measures scored the highest at 65%. Finally, 60% of the parent’s perception was that the educational school nurse role i.e. educating the school children, as a very important role.

Table 4: The most important responsibility of the nurse in school as perceived by the parents

Nurse responsibility	Variables	Frequency	Percent %
The first important	(Screening)	48	24.0 %
The second important	(Health education)	92	46.0%
The third important	(Follow up)	112	56.0 %
The fourth important	(curative role)	48	12
The fifth Important	(first aid)	24	12

Regarding the most important responsibility of the school nurse as perceived by the parents, table 4 shows that screening was considered her first responsibility by nearly quarter of parents. The second was the health education, which was mentioned by 46% of the parents, the third was the follow up, the fourth was the curative function, and the fifth was first aid

Table 5: The most important health education topic as perceived by the parents

health education topic	Variables	Frequency	Percent %
The first important	Communicable diseases	44	22.0 %
The second important	First aid	88	44.0%
The third important	Prevention of diseases	44	22.0%
The fourth important	Nutrition	44	22
The fifth important	Personal hygiene	68	34

Table 5 indicates the most important health education topic as perceived by the parents. 22 % of the parents agreed that prevention and control of communicable diseases was the first important health education topic. Regarding the second health education topic, less than half selected first aid (44%). The third topic selected was prevention of chronic diseases (22%). The fourth was health education about nutrition for school age children and the (22%), fifth health education topic, Personal hygiene, was selected by 34% of the parents.

Table 6: The relationship between the educational level of the mother and father and their perception of the qualifications required for the position of school nurse.

Table 6 shows the relation between the educational level of the mother and father and their perception of the qualifications required for the position of school nurse. It is clear that the higher was the education level of the mother or the father, the higher their expectation were regarding the qualifications of school nurses. A significant difference was found between the mothers’ education and their perception about the required level of qualifications of the school nurse.

		Qualification				X ₂
		BSC		Diploma school health		
Mother education	primary	7	10.8	1	1	0.002
	preparatory	8	12.3	4	4	
	secondary	21	32.3	29	29	
	university	29	44.6	66	66	
	total	65	100	100	100	
Father education	primary	1	5	0	0	0.5
	secondary	4	20	2	13.3	
	university	15	75	13	86.7	
	total	20	100	15	100	

Table 7: The responsibilities of the school nurse as perceived by the mothers and fathers

Variables	mother		father		T-test	
	mean	SD	mean	SD	F	Sig.
a- <u>School health services</u> Screening	3.78	0.473	3.74	0.505	0.442	0.507
Preventive	3.6485	0.57175	3.6286	0.5463	0.001	0.972
Curative	3.7515	0.44730	3.8286	0.4528	2.918	0.089
Special needs	3.6000	0.61287	3.5429	0.610	0.079	0.779
b- <u>Healthy environment</u> Ensure availability of Safety measures	3.4667	0.76136	3.5143	0.8178	0.599	0.440
Fire protection measures	3.5576	0.68389	3.4571	0.8509	3.813	0.052
Ensure healthy environment for school children and staff	3.4121	0.78077	3.6000	0.6039	3.548	0.061
c- <u>Health education</u> Health education session for the school children	3.4182	0.80451	3.5429	0.7413	0.286	0.593
Health education session for parents	3.2606	0.74814	3.3429	0.8023	0.979	0.324
Development of health education materials	3.1697	0.77793	3.2000	0.9009	2.463	0.118

Regarding the mean of the importance of the responsibility of school nurse as perceived by the mothers and fathers, no significant difference was found between them.

Discussion

School health program has been and should remain one of the most important investments in the health of the nation. In the wake of policy makers' keenness on cost-effectiveness, school program for health has recently received increased emphasis in health planning and finance. For our region, where health challenges have become a problem of 'developing' and 'developed' countries, re-orienting efforts and resources towards school health has become a necessity⁽¹⁰⁾.

The study aims to determine role of the nurse working in school as perceived by the school children' parents in Jeddah.

The American Academy of Pediatrics, the American School Health Association, and the National Association of School Nurses all recommend recruiting a nurse to every school. A ratio of 1 nurse for every 750 school children is an objective written in 'Healthy People 2010' from the US Department of Health and Human Services. The National Association of School Nurses (NASN) mentions one school nurse to no more than 225 school children when school special health needs school children are mainstreamed with other school children^(14,15). In the present study the school nurse was available in only 6% of the schools and 11% of the parents were not aware about her presence. However, all the parents agreed about their preference of having a school nurse in their children's' school. A significant difference was found between the mothers' education and their perception about the required level of qualifications of the school nurse. This can be explained by the higher expectations of the highly educated mothers. They expect a higher level of quality of care, with the more specialized nurse able to identify and meet the needs and solve the school age problems.

Regarding qualifications of the school nurse, it has been agreed that the minimum educations for the professional school nurse should include licensure as a professional nurse and a baccalaureate degree from a recognized college or university.

Core roles can be classified that the nurse working in school fulfills in order to substitute child, adolescent health and educational achievement. The roles are predominant and are applicable to school nurses at all levels of practice, in all geographic settings, and with all clients.

Results of an American descriptive, qualitative study conducted by Maughan (2011) summarize the expected responsibilities of nurses working in school⁽⁵⁾.

In the current study the parents in Jeddah selected the screening role followed by health education as the most important responsibilities for the school nurse. This result can be attributed to the classical figure of the school nurse doing vision and hearing screening and her main role being to provide preventive health services. However, her role in maintaining healthy school environment was mentioned by nearly half of the participants as an important role.

The parents, either fathers or mothers, were unaware of the other roles suggested by the coordinated school health program⁽¹⁷⁾.

Conclusion

There is inadequate perception and awareness of the parents about the role and responsibilities what the school health nurse can achieve in the schools.

Recommendations

Based on the results of the study the following are recommended:

1. The legal requirement for the recruitment of a full time qualified school nurse in each school, either governmental or non governmental, as a basic requirement for school health program.
2. Ensuring a system for continuing education for school nurses

3. Establishment of fully equipped school health clinics in each school . These should be visited by a /the school physician on regular basis
4. Coordination among the health team in school and the community in addressing the needs of school aged children, including nutritional and environmental aspects.
5. Awareness programs about role of the school nurse directed not only at the parents, but also at the school children, teachers and school administration

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