Nurses knowledge and practice regarding adverse events of vaccines in expanded program on immunization in health care centers

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ABSTRACT

background: As with any drug or medication, vaccines also require special attention because, though they are considered safe and beneficial to control diseases, they can trigger mild or even severe adverse events. Aim: assess nurse's knowledge and practice regarding adverse events of vaccines in expanded program on immunization in health care centers. Research design: A descriptive research design used in the current study. Setting: all available health care centers (14) & the only health office in Port Said city. Sample: All available nurses working in vaccination clinic, with total number of 64 nurses. Tools: data collected by two tools: tool one: Nurse's knowledge of vaccination and adverse event Questionnaire, tool two: observational checklists to assess nurse's practice about vaccination. Results: regarding the general knowledge of nurses of vaccines 96.9% of studied nurses had satisfactory knowledge, while 53.1% of studied nurses had satisfactory knowledge about contraindications of vaccines. 40.6% of nurses had unsatisfactory knowledge about adverse events of vaccines, moreover, 57.8% of the studied nurses had inadequate practice before and at the beginning of the vaccination session, while 93.8% of studied nurses had adequate practice during the vaccination session. Conclusion: most nurses had satisfactory score regarding overall knowledge of immunization, more than half of studied nurses had unsatisfactory knowledge regarding adverse event of vaccines. Moreover, more than half of studied nurses had inadequate practice. Recommendations: Establish training programs reinforce knowledge and practice of nurses related to adverse event of vaccines, continues training for nurses to keep them up to date in relation to immunization.

Keywords: Knowledge, practice, adverse events, vaccines, nurses, expanded program on immunization.

INTRODUCTION

The introduction of vaccines was one of the most effective public health interventions in controlling infectious diseases (*Louten*, & *Reynolds*, 2016). Immunization programs have proven over the years to be effective and beneficial in fighting infectious diseases. But based on current trends that show that many developing countries will not reach the Millennium Development Goals (MDG), there is an urgent need to accelerate efforts to control most common conditions that remain responsible for the largest morbidity and mortality among children under five years of age, Like diarrhea and pneumonia, safe and effective vaccines are now available (*Chauke-Moagi &Mumba*, 2012).

Through the strategies and initiatives of the world health organization and the united nations children's fund (UNICEF) such as the global immunization vision and strategy (GIVS) rapid disease control and access to each region red major positive achievements such as increasing the number of children reached and vaccines have been achieved diphtheria tetanus pertussis (DTP), measles reduction significantly reduced and polio eradication almost completely. Many children in developing countries get life-saving vaccines by supporting the Global Alliance for Vaccines and Immunization (GAVI) (*Chauke-Moagi & Mumba, 2012*).

A vaccine is a medicinal product. vaccine although it is designed to protect against disease. It can cause side effects just like any medicine. Most side effects of vaccination can be mild as swelling or redness at the injection site. Some vaccines associated with a rash of fever and pain are rare serious side effects, but may include seizures or a life-threatening allergic reaction. A possible side effect resulting from a vaccination is known as an adverse event (*Vincent, 2019*). Improper management of vaccines may lead to injuries or prevent vaccines from providing optimal protection. All personnel who will give or administer vaccines must have thorough, competency-based training regarding vaccine delivery policies and procedures before vaccinations are given (*Hamborsky & Kroger, 2015*).

There are many immunization components that nurses need to know from the correct anatomical sites to give injections to an increasingly complex immunization schedule to know where to report a vaccine adverse event, to the way vaccines stimulate the immune system, there is a lot to learn and remember! People have questions about the things they hear or read online about vaccines. Because more trusted nurses in the

profession can have a critical role in helping to improve confidence in vaccines and help them feel satisfied with their decision to have children. The nurse must know the facts about how vaccinations work in the human body to communicate about the risk of disease versus the risk of side effects of the vaccine (*Nursing and Immunization., 2018*).

Significance of the study:

The creation of the EPI program in 1974 by the World Health organization (WHO) resulted in the global eradication of smallpox and reduced the burden of many infectious diseases, including poliomyelitis, measles, tuberculosis, tetanus, and diphtheria majority of the world. Despite slow progress in increasing vaccination access and immunization coverage, the expanded immunization program reported 83% coverage of infants worldwide from the three doses of diphtheria tetanus dysentery vaccine in 2011 similar to coverage in 2009 by 82% and 2010 (85%). The expansion and delivery of life-saving vaccines in the 2010-2020 "vaccine's decade " is expected to save 6.4 million people, valued at hundreds of billions of dollars in low- and middle-income countries (*Perlman, et al., 2014*).

The safety of vaccines remains one of the biggest concerns for people and fear of side effects is often cited in surveys and stories as a reason for rejecting the vaccine.Nurses should be familiar with vaccine research and development, safety and efficacy data from these operations, actual risk / benefit scenarios for vaccination, and they should be prepared to answer questions about the vaccine (*Miller, Shimabukuro, Hibbs, Moro, Broder & Vellozzi, 2015*; *Bajnok, Shamian, Catton, Skinner& Pavlovic, 2018*).

A system of surveillance of adverse events has begun to monitor the side effects in Egypt within the expanded program on immunizations in 1999 resulted in interest in identifying the responsibility and conduct training at directorates and the districts level during the years 2005 to 2006 to increase the effectiveness of the system which have reported about 60000 cases in 2009. The number of cases that have been monitored by a system of surveillance of AEFI in 2014 was 196870 mild cases and 26 serious cases *(Ophori, Tula, Azih, Okojie &Ikpo, 2014)*.

As the nurses can play an important role in control of adverse events of vaccines & there are little information about knowledge and practice of nurses towards this

point in Port Said. Therefore, this study conducted to evaluate nurse's knowledge & practices toward adverse events of vaccines.

AIM OF STUDY:

Assess nurse's knowledge and practice of nurses regarding adverse events of vaccines in the expanded program on immunization in the health care centers in Port Said City.

Research Objectives:

1. To identify nurse's knowledge regarding vaccination and its adverse events.

2. To evaluate the nurse's practice before, at the beginning, during and after the vaccination session.

SUBJECTS AND METHOD:

Research design: -

A descriptive research design was used in the current study.

Setting:

This study conducted in all available primary health care centers (14) and the only health office in Port Said city, the primary health care centers and the health office namely as follows:

El-Arab Awal health care center (4 nurses), El -Arab Thani health care center (4 nurses), El-Manakh Awal health care center (4 nurses), El-Manakh Thani health care center (4 nurses), El-kabouty health care center (4 nurses), El-Gawhara health care center (4 nurses), El-Keweet health care center (4 nurses), Osman Ebn Afan health care center (4 nurses), Omar Ebn el Khatab health care center (4 nurses), Bank el eskan health care center (4 nurses), Fatma El-Zahraa health care center (4 nurses), Mustfa Kamel health care center (4 nurses), Port Fouad Awal health care center (4 nurses).

Study sample:

All nurses working in vaccination clinic in prementioned setting number were 64 nurses were included in the study.

Tools of data collection:

The study data were collected by using of the following two tools:

Tool (I): Nurses' knowledge of vaccination and adverse events Questionnaire:

This tool was adopted from (**Metwaly**, **2014**) to asses knowledge of nurses toward vaccination and its adverse events in the health care centers in Port Said City. It composed of 85 questions and divided into 2 parts:

<u>The first part: Socio-dem0graphic characteristics</u> including 6 questions; age, sex, marital status, qualifications, name of the health facility and receiving of training courses).

<u>Second part: Knowledge of the studied nurses included 7 points; general knowledge</u> of the studied nurses (4 questions), knowledge about mode of administration of each vaccine (5 questions), knowledge about site of administration of each vaccine (6 questions), knowledge about Place of vaccines in the refrigerator (7 questions), knowledge about immunization precautions; the most essential immunization precautions (9 questions), fate of the remaining vials at the end of the vaccination session (4 questions), general practical precautions of EPI (6 questions), some vaccines related precautions of EPI (9 questions) and health instructions given to the mother (6 questions), knowledge about EPI vaccines regarding contraindications (5 questions) and knowledge about EPI vaccines regarding adverse events of vaccines (10 questions).

• Scoring system

For the knowledge items, a correct answer was scored 1 and the incorrect scored zero. For each area of knowledge, the scores of the items were summed-up and the total scores of each area were converted into a percent score, where score below **75%** was considered unsatisfactory, while those equal to or above **75%** was considered satisfactory. For total knowledge the scores of the all areas were summed-up and the total. scores were converted into a percent score, where score below **75%** was considered unsatisfactory, while those equal to or above **75%** was considered satisfactory, while those equal to or above **75%** was considered satisfactory, while those equal to or above **75%** was considered satisfactory.

Tool (II): Nurses practice related to vaccination, Observational checklist:

This tool was adopted by (*Metwaly*, 2014) to assess nurse's practice before, at beginning, during and after giving vaccination. It composed of 24 questions as follows:

Evaluation of the practice of nurses includes 4 items (24 questions) as follows: nurses practice before and at the beginning of the vaccination sessions include (7 questions), nurse's practice during the vaccination session (6 questions), nurse's practice in related to giving health instructions to mothers before and after vaccination (5 questions) and the nurse's practice in relation to infection control procedures (**6** questions).

• Scoring system:

Based on litterateur review, for the nurses practice of each area, correctly done item scored 1 and not done or done incorrectly item scored zero the scores of the items were summed-up and the total scores of each area were converted into a percent score, where score below 75% was considered Inadequate, while those equal to or above 75% was considered Adequate. For total practice the scores of the all areas were summed-up and the total scores were converted into a percent score, where score below 75% was considered Inadequate, while those equal to or above 75% was considered Inadequate, while those equal to or above 75% was considered Inadequate, while those equal to or above 75% was considered Inadequate, while those equal to or above 75% was considered Inadequate.

Content Validity:

Content validity of tool (I) and tool (II) were tested by five experts from Faculty of Nursing in the field of community health nursing department. It is conducted to test the tools for appropriateness, comprehensiveness, relevance, and clearance. Their opinions are elicited regarding the tool format, layout, and consistency. The necessary modifications are done accordingly.

Reliability:

The tool was tested for reliability using Cronbach's alpha that was = 0.88 for nurses'knowledage, tool (I) while practice was 0.87, both tools reliable

Pilot study:

After review of the study tools by experts and its approval, the pilot study was conducted before starting the actual data collection on 6 nurses (10%) of subjects to evaluate the validity of tools and to estimate the proper time required for answering the questioner and it was conducted from 1/1/2018 to 31/1/2018. Based on the results of the pilot study, there was no need for modifying the tools; the pilot study sample was

included in the study as recommended by supervisors because of the small size of the sample.

The main purpose of the pilot study was testing the clarity, feasibility of the tools. Find out the possible obstacles and problems that might face the researcher and interfere with data collection. Detect any problems peculiar to the statements as a sequence of questions and clarity. Estimate time needed for data collection.

Fieldwork:

After obtaining the official Permission to conduct the study and after finalization of tools. Oral consent was obtained from nurses. The researcher visited health care centers for gathering data over a period of ten months specifically three days per week. The days were Sunday, Wednesday and Thursday from 08.00 a.m. to 2.00 p.m. The researcher met nurses and explained the nature and purpose of the study. The tools were the sheet filled by nurses. The total time to fill the tool by nurses was ranges from 20 to 30 minutes for tool 1 and 40-45 minutes for tool 2. The period of data collection began at February 2018 to the end of November 2018. After completion, the nurses were acknowledged for their cooperation.

ADMINISTRATIVE DESIGN :

Before conduction of study, an official letter explaining the aim of the study issued from the Dean of the Faculty of Nursing, Port Said University to the ministry of health representative to obtain his permission to conduct the study. The director of each setting contacted and informed in order to obtain permission to include the nurses on the present research, also agreement to participate in current study took from the nurses themselves, after explanation of the purpose of the study for each of them.

Ethical considerations:

The ethical research consideration in this study included the following:

- Explain the aim of the study to the director of the health centers to take his permission to do the study
- Explain the aim of the study to each participant to be familiar with the importance of his/her participation.

• A brief explanation of the study was given to assure the participants that the information obtained was confidential and used only for the purpose of the study.

STATISTICAL DESIGN:

The collected data organized, categorized, tabulated, entered, and analyzed by using SPSS, (statistical package for social sciences), soft-ware program version 23, which will be applied to frequency tables.

Following statistical measures used:

- **1.** Descriptive measures included: count, percentage, and arithmetic mean, standard deviation, minimum and maximum.
- **2.** Statistical test included: McNamara Chi square, Friedman ANOVA, and Spearman correlation.
- **3.** The level of significance selected for this study will be $p \le 0.05$.

RESULTS:

Table (1): shows that all (100%) of the studied nurses were female, 39.1% aged between 30-40 years with a mean age 39.31 ± 9.82 years, 79.7 % were married, Regarding to their qualifications 89.1% had Technical secondary school Diploma of nursing, 12.5% recruited at heath office (1), and 81.3 % reported that they received any training courses about vaccination programs.

Table (2): regarding the general knowledge of nurses of vaccines 96.9% of the studied nurses had satisfactory knowledge, 93.8% of the studied nurses had satisfactory knowledge about essential immunization precautions, while 53.1% of the studied nurses had satisfactory knowledge about contraindications of vaccines, unfortunately only 40.6% of the studied nurses had satisfactory knowledge as regard adverse events of vaccines, finally, 89.1% of the nurses had satisfactory score regarding overall knowledge of immunization.

Table (3): showed distribution of the studied nurses according to their practice before, at the beginning, during giving the vaccination, and also their practice in infection

control procedures. As shown in the table, 57.8% of the studied nurses had inadequate practice before and at the beginning of the vaccination session, while 93.8% of the studied nurses had adequate practice during the vaccination session. Only 21.9% of the studied nurses had had adequate practice in relation to infection control procedures, unfortunately 57.8% of the studied nurses had inadequate overall practice regarding immunization.

Table (4): concerning relation between the overall knowledge of the studied nurses with their demographic data, results indicated that, there was a statistically significant difference between overall knowledge of nurses and their age, marital status and qualifications, while other demographic data hadn't statistically significant differences with knowledge.

Table (5): As regard correlation between nurse's knowledge and their practice in vaccination. Table revealed that, there were a statistically significant correlations between nurse's practice, their general knowledge, essential immunization precautions, contraindications of immunization and their overall knowledge, where $p=0.023^*$, <0.001*,0.039*, <0.001*respectively.

Items of demographics data	No.	%		
Sex				
Female	64	100.0		
Age(years)				
<30	10	15.6		
30-40	25	39.1		
40 - 50	17	26.6		
≥50	12	18.8		
Min. – Max.	22.0 – 59	22.0 –59.0		
Mean ± SD.	39.31 ± 9	39.31 ± 9.82		
Marital status				
Single	8	12.5		
Married	51	79.7		
Divorced	2	3.1		
Widow	3	4.7		

		r
Qualifications		
Technical secondary school	57	89.1
Institute nursing	2	3.1
Bachelor of nursing	5	7.8
Name of the health facility		
Maktab seha awal	8	12.5
El-arabawal health care center.	4	6.3
El -arab thani health care center.	4	6.3
El-manakh awal health care center	5	7.8
El-kabouty health care center.	4	6.3
El-gawhara health care center.	4	6.3
El-keweet health care center.	4	6.3
Osman ebn afan health care center.	5	7.8
Omar ebn el khatab health care center.	5	7.8
Bank el eskan health care center.	4	6.3
Fatma el-zahraa health care center.	4	6.3
Mustfa kamel health care center.	5	7.8
Port fouad awal health care center.	4	6.3
Port fouad thani health care center.	4	6.3
Training courses about vaccination		
programs		
Yes	52	81.3
No	12	18.8

	Ungetisfectory		Satisfactory	
	Unsatisfactory			
	N0.	%0	N0.	% 0
1.General knowledge	2	3.1	62	96.9
A. General knowledge	0	0.0	64	100.0
B. Place of vaccines in the refrigerator	56	87.5	8	12.5
C.Mode of administration of vaccine	3	4.7	61	95.3
D. The site of administration of vaccines	20	31.3	44	68.8
2.Essential immunization precautions		6.3	60	93.8
A. Most essential immunization precautions	1	1.6	63	98.4
B. Fate of the remaining vials at the end of the		64.1	22	25.0
vaccination session		04.1	25	55.9
C. General practical precautions of EPI		3.1	62	96.9
D. Some vaccines related precautions of EPI		23.4	49	76.6
E. Health instructions given to the mother		3.1	62	96.9
3. Contraindications	30	46.9	34	53.1
4. Adverse events of vaccines of EPI	38	59.4	26	40.6
Overall knowledge	7	10.9	57	89.1

Table (2): Distribution of the studied nurses according to their knowledge about vaccination (n = 64)

Table (3): Distribution of the studied nurses according to their practice before, at beginning, during giving vaccination & in infection control (n = 64)

Observation of nurses prestice	Inadequate		Adequate	
Observation of nurses practice	No.	%	No.	%
Evaluation of the practice of nurses before and at	37	57.8	27	42.2
the beginning of the vaccination session				
Evaluation of the practice of nurses during the vaccination:	4	5.3	50	93.8
Evaluation of the practice of nurses in terms of				
giving health instructions before and after	37	57.8	27	42.2
vaccination:				
Evaluation of nurses' practice in relation to	50	78.1	14	21.9
infection control procedures				
Overallpractice	37	57.8	27	42.2

Domographics data	Overall knowledge	Tost of sig	n	
Demographics data	Mean ± SD.	Test of sig.	Ч	
Age(years)				
<30	75.89 ± 8.13			
30 <40	82.09 ± 4.44	$E = 2.420^{*}$	0.022*	
40 < 50	81.75 ± 6.63	1 - 3.439		
≥50	82.63 ± 3.79			
Marital status				
Single	73.01 ± 10.35			
Married	82.32 ± 4.10	F=	<0.001*	
Divorced	80.37 ± 2.64	7.434*	<0.001	
Widow	83.18 ± 4.95			
Qualifications				
Technical secondary school	81.78 ± 5.55			
Institute nursing	82.71 ± 5.95	F=5.646*	0.006^{*}	
Bachelor of nursing	73.08 ± 6.07			
Did you have any training				
courses about vaccination				
programs?				
Yes	80.97 ± 5.34	t = 0.459	0.648	
No	81.85 ± 8.50	ι– 0.439	0.040	

Table (4): Relation between overall knowledge of EPI with demographics data

Table (5): Correlation between knowledge of the studied nurses and their practice of immunization (n = 64)

Knowledge items	Observation of nurses practice		
	r	р	
1.General knowledge	0.284*	0.023*	
2.Essential immunization precautions	0.439*	< 0.001*	
3. Contraindications	0.258*	0.039*	
4. Adverse events of vaccines of EPI	0.187	0.138	
Overall knowledge	0.456*	<0.001*	

DISCUSSION:

Vaccination occasionally leads to undesirable effects including adverse reactions that are referred to as adverse events following immunization (AEFI). These adverse

events are of concern and are believed to be caused by immunization. The commonly encountered adverse events following vaccination include pain at the injection site, swelling, and redness at the site of injection. Others are fever, rash, excessive crying, convulsions, anaphylaxis, encephalitis, drowsiness, or irritability (*Masika, Atieli & Were, 2016; WHO 2018*).

The present study aimed to assess knowledge and practice of nurses towards adverse events of vaccines in expanded program on immunization through identify the knowledge of nurse towards precautions, contraindications and adverse events of vaccines in expanded program on immunization, then evaluate the practice of nurses before or at the beginning, during and after the vaccination session also determine the relation between knowledge and practice of nurses towards adverse events of vaccines in expanded program on immunization.

Related to the knowledgeof the studied nurses. As noted in results, most of the studied nurses had satisfactory score regarding general knowledge, vaccines related precautions knowledge. Regarding the general knowledge of nurses of vaccines 96.9% of them had satisfactory knowledge. These improved scores happened could be due to some reasons as the first one frequent gradual periodical training on vaccination and all required information related to it. The second reason is the applied strategy of immunization that implemented by the ministry of health. The third reason is the orientation programs that provided to the novel staff nurses which help all staff upgrading.

Yamoah, Bangalee, Oosthuizen, 2019 concluded that based on the scores, detailed knowledge of vaccination and adverse events was lacking; only about 10% of study participants were highly knowledgeable about the details of adverse events following vaccination, with a vast majority having low to moderate knowledge. In Ghana, the FDA has intensified the training of both public sector and private sector of health care providers over the past few years, in the bid to improve knowledge of the safety of healthcare products, including vaccines. Additionally, the WHO Africa Collaborating Centre for Advocacy and Training in vaccination in Ghana and the entire African region in best practices, including vaccine pharmacovigilance. Despite these interventions.

Widsanugorn, Suwattana, Rashid, Sakamoto, (2011) found in their study that findings showed that healthcare workers in hospitals have better knowledge about vaccination. The knowledge of healthcare workers who have longer work experience in EPI was good. Moreover, trained healthcare workers had better knowledge than untrained healthcare workers. Practices in the cold chain system in hospitals were also significantly better than practices in health centers.

Al-Ayed, (2015) founded that insufficient knowledge, inadequate training and less enthusiasm about immunizations by health professionals have a heavy negative impact on the quality of immunization services for children. Health professionals' perceptions of immunization against vaccine preventable diseases must inevitably be transmitted to parents, and parents can be perplexed by the confusing and contradictory messages they may receive from health professionals. Strong professional commitment is the key to improved immunization uptake.

As regards to the studied nurse's level of practice, data indicated that most of the studied nurses had adequate practice during the vaccination. More than half of the studied nurses had inadequate practice before and at the beginning of the vaccination session, more than three quarter of the studied nurses had inadequate practice in relation to infection control procedures, while more than half of them had inadequate overall practice. This result was achieved due to staff nurses are more equipped in knowledge and information related to the vaccines also attend educational programs and this improves their knowledge related to immunization and vaccines but their practice needs another practical and professional training to improve their performance.

The finding of the present study is disagree with *Swarnkar, Baig, Soni, Shukla & Ali, (2016)* who summarized their findings in this dimension as there was very good practice of handling of waste generated during immunization session and practice of infection control procedures as most of workers (84%) dispose of waste at appropriate place decided at health center and appropriate use of syringes. Moreover, *Al-Ayed, (2015)* mentioned that almost 35% of respondents denied any previous training in infection control procedures during immunization. This highlights the need for training of health care providers dealing with children at immunization process a fact which has been pointed out by health care authorities worldwide.

Results of the present study indicated that, there were statistically significant difference between the overall knowledge with age, marital status and qualifications,

while other demographic data hadn't statistically significant differences with knowledge.

This finding is in agreement with *Swarnkar*, *Baig*, *Soni*, *Shukla & Ali*, (2016) found that the effect of education on knowledge and practice was not found statistically significant within the group and between groups, while the results revealed that statistically significant improvement in knowledge with age and level of education. In the same way a study conducted by Department of pediatrics, Medical College Kota, in Nagur district of Rajasthan regarding knowledge, attitude and practice of Health workers in Immunization. Similar results found by that knowledge of health workers increased with qualification. There was negative correlation between knowledge (P = -.106) and practice (P = -.041) of Health workers with increase in duration of years of experience.

Seikn & Faorouz, (2016) found Non-significant (P = -.095) negative correlation between previous trainings taken and their knowledge regarding immunization, also significant (P = -.041) but negative correlation seen between previous trainings taken and their role in improvement in practices. It has been also observed that worker having a greater number of years of experience have low knowledge level (inverse relation between number of years of experience with knowledge), also workers who attended more trainings were less educated because of their more length of service.

Related to correlation between overall knowledge and nurse's practice during the vaccination, the results of this correlation showed a statistically significant correlations between nurse's practice, their general knowledge, essential immunization precautions, contraindications of immunization and their overall knowledge, This result was achieved due to staff nurses are more equipped in knowledge and information related to the vaccines also attend training programs and this improves their knowledge related to immunization and vaccines but their practice need another practical and professional training to improve their performance.

Mapatano, Kayembe, Piripiri, Nyandwe, (2018) found that, that no significant correlation between knowledge and practice of the staff nurses within the vaccination process.

This result was supported with the study of *Bondt &Wesselo*, (2012) who stated that good performance may be a predictor and evidence for satisfactory level of knowledge related to vaccines.

CONCLUSION:

Based on the findings of the current study, most of the nurses had satisfactory score of overall knowledge regarding immunization. Moreover, more than half of the studied nurses had unsatisfactory knowledge regarding adverse event of vaccines, moreover more than half of the studied nurses had inadequate practice.

A statistically significant positive association between overall knowledge and their overall practice of vaccination was detected. Furthermore, there were a statistically significant relation between the overall knowledge with age, marital status and qualifications.

RECOMMENDATIONS:

- Establish an educational program to improve the nurse's knowledge regarding contraindications and adverse events of vaccines in the EPI.
- Continues training for nurses to keep them up to date in related to immunization.
- Routinely validate staff's knowledge and competencies regarding vaccine administration.
- Hand washing monitoring before handling vaccines.
- Simple and easily understood online materials in the form of audio-visuals can be used to address the knowledge gap.
- The Nurses must Inform the mother when to come back or when to sake medical advice if any adverse event occur to the child.

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معلومات و ممارسات الممرضات تجاه الأعراض الجانبية لطعوم البرنامج الموسع للتحصين

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الخلاصة

كما هو الحال مع أي دواء، تتطلب اللقاحات أيضًا اهتمامًا خاصًا لأنها، على الرغم من أنها تعتبر آمنة ومفيدة للسيطرة على الأمراض، يمكن أن تؤدي إلى أحداث ضارة خفيفة أو شديدة؛ البعض متوقع بينما البعض الآخر قد يكون غير معتاد. هدف البحث: تهدف هذه الدراسة إلى تقييم معرفة وممارسات الممرضات تجاه الأحداث الضارة للقاحات في البرنامج الموسع للتحصين في مراكز الرعاية الصحية ببورسعيد. طرق وأدوات البحث: تم استخدام تصميم وصفى في الدراسة الحالية. سيتم تضمين جميع الممرضات العاملات في عيادة التطعيم (64) في الدراسة. مكان البحث: جميع مراكز الرعاية الصحية الأولية الـ 14 ومكتب الصحة الوحيد في مدينة بورسعيد. أدوات جمع البيانات: تم جمع البيانات عن طريق أداتين هما: الأداة (1) استبيان المقابلات المنظمة لتقييم معرفة الممرضات، الأداة (2) قوائم الملاحظة لتقييم ممارسات الممرضات وتقييم سلسلة التبريد في مراكز الرعاية الصحية الأولية. النتائج: أوضحت النتائج أنه فيما يتعلق بالمعرفة العامة لممرضات اللقاحات ، فإن 96.9٪ منهم لديهم معرفة مرضية ، 93.8٪ منهم لديهم معرفة مرضية حول احتياطات التحصين الأساسية ، بينما 53.1٪ منهم لديهم معرفة مرضية حول موانع اللقاحات ، إجمالي المعرفة المتعلقة الأحداث السلبية لقاحات برنامج التحصين الموسع ؛ 40.6٪ من الممرضات الخاضعات للدراسة كان لديهن معرفة غير مرضية عن الأحداث الضارة للقاحات ، علاوة على ذلك ، 57.8٪ من الممرضات الخاضعات للدراسة لم يكن لديهن ممارسات كافية قبل وبداية جلسة التلقيح ، بينما 93.8٪ منهم كان لديهم ممارسة كافية خلال جلسة التطعيم ، 21.9 فقط ٪ منهم لديهم ممارسة كافية فيما يتعلق بإجراءات مكافحة العدوى. الخلاصة: بناء على نتائج الدراسة الحالية، حصل معظم الممر ضات على درجة مرضية فيما يتعلق بالمعرفة العامة للتحصين. لسوء الحظ، كان لدى أكثر من نصفهم معرفة غير مرضية فيما يتعلق بالأحداث الضارة للقاحات. علاوة على ذلك، فإن أكثر من نصفهم لديهم ممارسات غير كافية. التوصيات: أوصت الدراسة بإنشاء برامج تدريبية تعزز معرفة وممارسة الممرضات المتعلقة بالحدث الضار للقاحات ، وتواصل تدريب الممرضات لإبقائهن على علم بالتطعيم ، والتحقق بشكل روتيني من معرفة الموظفين والكفاءات فيما يتعلق بإعطاء اللقاح ، وتسريع الجهود لتعزيز مستوى ممارسة الممرضة فيما يتعلق بمكافحة العدوي.

الكلمات المرشدة: معرفة وممارسات، الآثار الجانبية، الطعوم، البرنامج الموسع للتطعيمات.