Nurses' Perception and Developing an Improvement Plan Regarding Child Safety in Benha Hospitals

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Abstract: Nurses' perceptions about safety are important because organizations with strong safety consistently report fewer workplace injuries and fewer harmful events than do organizations with weak safety. **Aim:** The study aimed to assessing nurses' perceptions of child's safety at medical of pediatric and critical of pediatric units and developing an improvement plan to enhance child safety at the study setting. **Subjects and method:** The study was conducted in critical care units and medical units of pediatrics at Benha University Hospitals, Benha Educational Hospital Affiliated to the Ministry of Health and Specialized Children Hospital in Benha City. Research design: A descriptive study design was used. **Tools of the study included *1st part:*** Interview questionnaire sheets were used to collect the participants' characteristic data, ***2nd part:*** knowledge of the studied nurse regarding child safety, 2) observational checklists to assess the safety of nursing care for the children in hospital**. Results**: nurses perceive child's safety positively. There were statistically significant differences between perception of nurses working in critical care units and perception of nurses working medical department of pediatric.There were a statistically significant differences between perception of the staff nurses and perception of head nurses in all items related to child' safety. **Conclusion:** nurses perceive child's safety positively and there was a statistically significant difference between nurses working in critical of pediatric care units and nurses working in medical of pediatric unit regarding there perception of child safety. Also, there are a statistically significant difference between staff nurses and head nurses regarding there perception of child safety. **Recommendation:** Hospital should have available policies for promoting child safety. Incidence reports for children's exposure to hazards in hospitals that threaten their well being should be available.

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1. Introduction

Safety is a condition or state of being resulting from the modification of human behavior and designing of the physical environment to reduce hazards, thereby reducing the chance of accidents (***Kalisch, & Aeberdold)*** Child safety is defined as the prevention of harm to child "emphasis is placed on the system of care delivery that prevents errors***;(Aspden et al.,2010).***Child safety also defined as the prevention of harm :"freedom from accidental or preventable injuries produced by medical care***"(Agency for Health care Research and Quality,2004)***

Child safety is considered as one of the most important aspects of the healthcare. It is a global issue, affecting countries at all levels of development. It has been defined by several organizations as the freedom from accidental or preventable injuries produced by medical care (Institute of Medicine, (IOM), 1999; and Agency for Healthcare Research and Quality ***(AHRQ, 2005).*** According to the World Health Organization **(WHO)** report, one out of every 10 hospital patients in many developed countries experiences an adverse event which can lead to serious injury and death. The situation in developing countries is even worse ***(WHO, 2008).***

Nurses are the main group of healthcare providers in the hospital; they are generally closer to child than other clinicians and spend the most time in the child care departments. As they continually oversee, coordinate and provide care, nurses are well positioned to strengthen the safety net for child care within hazardous hospital environments. Given the integral role which nurse's play in promoting child safety, further examination of the link between nursing work and child safety is warranted ***(Ramanujam et al., 2008).*** For instance, they are the most likely to recognize workflow, physician plan or communication-related issues that give rise to child safety problems and also most likely to identify possible solutions and work to implement them ***(Thompson et al., 2005).*** Equally important is that nurses are most often identified with safety concerns ***(Wellace & Chen, (2005*)**.** For all of these reasons, nurses are ideally placed to drive the safety and quality agenda within health care ***(Richardson & Storr, 2010).***

The National Patient Safety Agency provides seven steps to pediatric patient safety. ***(NPSA, 2008).*** The steps help the organizations ensure that the care provided to the child is as safe as possible, and that when things do go wrong the right action is taken. These steps are: Building a safety culture; lead and support the staff; integrate the risk management activity; promote reporting; involve and communicate with child and the public; learn and share safety lessons; and implement solutions to prevent harm. These steps can be used as a guideline for healthcare organization to provide safe care ***(Health Canada, 2005)***.

Aim of the study

Assess nurses' perceptions of child safety measure and develop an improvement plan to enhance child safety measures in Benha hospitals if there is lake of safety measures.

Research Questions:

1. Is there a sufficient perception regarding child safety for nurses working in Benha hospitals?
2. Are there any differences between nurses working in critical care units and nurses working in medical department of pediatric regarding their perception of child safety?
3. Are there any differences between staff nurses and head nurses regarding their perception of child safety?

2.Materials and method

Design:-

A descriptive study design was used.

Setting:-

The study was conducted in critical care units and medical departments of pediatrics at Benha University Hospitals, Benha Educational Hospital Affiliated to the Ministry of Health and the Specialized Children Hospital in Benha City

Subjects:-

The subjects were included in this study were composed of

All available number of staff nurses and head nurses in the previously mentioned settings at the time of the study. Total number of nurses 167 working in three shifts. Participants included 32 head nurses and 135 staff nurses in the three hospital 80 nurse in critical care units and 55 nurse in medical department of pediatric The inclusion criterion was that head nurses and staff nurses should be working at the current nursing units and position for at least one year.

Tools of data collection:

Two tools of data collection were used as follow.

I. Structured interviewing questionnaire sheet :

Arabic structured interviewing questionnaire sheet was designed by the researcher after review of literature. The questionnaire sheet nurses had 20-30 minutes to fill it. It divided into 3 parts as follow:

Part: I it covered the participants' characteristic data, such as;

Age, job, years of experience, education, site of work, position.

part: II knowledge of the studied nurse regarding child safety, definition, type of error regarding child safety, obstacles, which discover the errors, policy about child safety as child identification, the effectiveness of communication among caregivers, the safety of high-alert medications, Reduce the risk of health care–associated infections, and policy to reduce child fall.

Scoring system of nurses' knowledge:-

Scoring system for knowledge of the studied nurses was calculated as the follows:

- All knowledge variables were weighted as (2) for complete correct answer when choosing all given answer,(1) for incomplete correct answer when choosing one or more of the given answer and,"(0) for choosing don't know.
- The nurses' total knowledge score was classified as the following
  - Complete: (≥75%)
  - Incomplete: (50- < 75%)
  - Don't know: (<50%).

Part: III was designed to assess nurses' perception regarding child safety was adopted from Agency for Health care Research and Quality ***(AHRQ) 2004.***and translate from English to Arabic by researcher certain modification were done by the researcher to suit the nature of the study. It contains from Overall perceptions of child safety, learning, Teamwork within hospital units, Communication openness, Non-punitive response to error, Staffing, Teamwork across hospital units, Hospital handoffs and transitions.

Scoring system of nurses' perception:-

Scoring system for perception of the studied nurses was calculated as the follows:

- All perception variables were weighted as (0) score for disagree, (1) score for uncertain, and (2) score for agree.
- The nurses' total perception score was classified as the following
  - Agree: ≥ 75%
  - Uncertain: 50 -75%
  - Disagree: < 50%.

2. Observational checklists

The observational checklists were adapted from the ***(Egyptian Ministry of Healthand Population, 2002, Bindler and Ball, 2008 and Smith, et al.,2008)***. Certain modification were done by the researcher in the checklists to suit the nature of the study. It was used to assess the safety of nursing care for the children in hospital it included the procedures of hand washing, infection control precaution, intravenous infusion,

medications safety, injury prevention monitor respiratory status, oxygen therapy, nebulizer inhalation, suctioning and fire prevention

Scoring system of nurses' practice:-

Scoring system for practicing nursing care was calculated as the following:

- performance step was weighted as: 0 for not done, 1 for incomplete done, and 2,for completely done, for each procedure total score was scored as:
  - Complete: (≥75%)
  - Incomplete: (50- < 75%)
  - Not done: (<50%).

Administrative design:

An official written approval letter clarifying the purpose of the study was obtained from the Dean of Faculty of Nursing Benha University to collect data from the pre mentioned study settings, also written approval was submitted to the director of Benha University Hospitals and director of Benha Educational Hospital and director of Specialized Children Hospital to collect data from pre mentioned study setting.

Field work:

The actual data collection took seven months from the first of April to the end of October.The designed questioner was distributed through meeting with staff nurses and head nurse in the selected study settings, the researcher started with introducing herself to participants and explained the aim of the study. The participants were asked to fill up the tool through the different shift; it took from 20-30 minutes to fill the questionnaire by each nurse while their safety of nursing care was assessed by using observational checklist during the actual practice (nurses were not aware that the researcher is observing their performance). The researcher provides simple rewards such as pen to motivate the studied nurse during data gathering stage. The researcher was available at each study setting by rotation, four days per week during morning and afternoon shifts.

Based on the results of the study a suggested improvement plan to enhance child safety was developed by the researcher.

Statistical design*:*

After completion of data collection, the data were entered and tabulated, statistically analyzed using Data entry was done using Epi-Info 6.04 computer software package, while statistical analysis was done using SPSS 15.0 statistical software package. Data were presented using descriptive statistics in the form of frequencies and percentages for qualitative variables, and means and standard deviations for quantitative variables.

Data are summarizing using:

Arithmetic mean: as average describing the central tendency of observations.

The Standard Deviation: as a measure of dispersion of results around the mean (for quantitative variables)**.**

The number of observations: for each the percentage (for qualitative variables

3.Result

Table (1) reveals that the near to half of staff nurses (45.1%), their age ranged between >20 - <25 years with a total mean age of **27.24±4.5**, while more than half of head nurses(53.1%), their age ranged between 25-<30 years, with a mean age of **27.15±3.9**. Results also showed that 90.4%of the staff nurses respectively held a diploma degree of while (90.6) of head nurses had a Bachelor degree in nursing. Results also showed that the years of experience it was found that, 40.6% of the head nurses and 43% of staff nurses had experience between 5-<10 years in nursing. Almost all staff nurses (98.5%) had direct contact with children

Table (2) indicates that 45.5%, 47.5% of the studied nurses don't know hospital policy regarding child identification correct way and decrease hospital acquired infection respectively. While 11.3%3.8% of the nurses in critical unit had complete knowledge regarding hospital policies about child identification and improving methods of effective communication respectively the same table indicates that there is a statically significant relation between studied staff nurses knowledge regarding hospital policies about child identification correct way, decrease hospital acquired infection and their working site (p<0.05). while there is no statically significant relation between their perception about hospital polices regarding improving methods of effective communication (p >0.05).

Table (3) shows that 99.3%, 52.6% of the studied staff nurse disagree that child safety is never sacrificed to get more work done and, they had child safety problems in their unit.81.3%, 68.8% of the studied head nurses agreed that child safety is never sacrificed to get more work done and, their procedure and systems are good at preventing errors from happening.

Table (4) shows that 98.2%, 43.6% of the studied staff nurse in medical unit disagree that child safety is never sacrificed to get more work done and, they had child safety problems in their unit.100%, 17.5% of the studied nurses in critical unit disagreed that child safety is never sacrificed to get more work done and, their procedure and systems are good at preventing errors from happening.

Table (5) indicates that 50.9%, 47.1% of the studied nurse in medical unit disagree that they are actively doing things to improve patient safety. And Mistakes have led to positive changes respectively. While 20%, 7.5% of the studied nurses in critical unit agreed that after they make changes to improve child safety, we evaluate their effectiveness they are actively

doing things to improve patient safety respectively. The same table illustrates that there is a statically significant relation between studied staff nurses perception regarding that mistakes have led to positive changes, after they make changes to improve child safety, they evaluate their effectiveness. and their working site (p <0.05).while there is no statically significant relation between their perception regarding that are actively doing things to improve child safety. and their working site (p >0.05).

Table (6) illustrates that 49.1%, of the studied nurse in medical unit agreed that staff feel free to question the decisions or actions of those with more authority and 32.7% of the studied nurse in medical unit of them were uncertain that staff will freely speak up if they see something that may negatively affect child care. While 56.3%, 25.0%of the studied nurses in critical unit agreed that staff feel free to question the decisions or actions of those with more authority and Staff are afraid to ask questions when something does not seem right respectively. The same table reveals that there is no statically significant relation between studied staff nurses perception regarding staffing as Staff will freely speak up if they see something that may negatively affect child care, Staff feel free to question the decisions or actions of those with more authority Staff are afraid to ask questions when something does not seem right and their working site (p >0.05).

Table (7) illustrates that there is a statically significant relation between studied staff and head nurses performance regarding Hand washing, Intravenous infusion, Injury prevention, Monitor respiratory status, oxygen therapy (nasal cannula, ventilator) and Nebulizer inhalation (p <0.05).

Table (8) reveals that there is no significant association and a positive correlation between total knowledge, perception and performance score of the studied staff nurses.

Table (9) reveals that there is no significant association and a positive correlation between total knowledge, perception and performance score of the studied head nurses.

Table (1): Percentage distribution of the studied nurses regarding to their socio demographic characteristics.

	Staff nurse n=135		**Head nurse n=32**	
	No	**%**	**No**	**%**
Age in year				
20-	43	31.9	9	28.1
25-	61	45.1	17	53.1
30-	15	11.1	3	9.4
≥35	16	11.9	3	9.4
Mean ±SD	**27.24±4.5**		**27.15±3.9**	
Educational level				
Nursing diplomas	122	90.4	0	0.0
Technical nursing education	13	9.6	0	0.0
Bachelor degree of nursing	0	0.0	29	90.6
Postgraduate nursing study	0	0.0	3	9.4
Years of experience				
>5	27	20	13	40.6
5-	58	43	13	40.6
10-	34	25.1	4	12.5
≥15	16	11.9	2	6.3
Mean ±SD	**6.28±0.95**		**5.84±0.88**	
Work place				
Medical department	55	40.7	13	40.6
Critical care unit	80	59.3	19	59.4
Nature of work				
Direct contact with children	133	98.5	32	100
Indirect contact with children	2	1.5	0	0.0
Training programs				
Yes	13	9.6	10	31.3
No	122	90.4	22	68.7

Table (2): Percentage distribution of the studied nurses regarding their knowledge about hospital policies and procedures that improve child safety.

Item	Studied subject												X2	*P* Value
	Medical unit n=55						Critical unit n=80							
	Complete Correct		Incomplete correct		Don't know		Complete correct		Incomplete Correct		Don't Know			
	No	%	No	%	No	%	No	%	No	%	No	%		
Child identification correct way	0	0.0	25	45.5	30	54.5	9	11.3	33	41.3	38	47.5	6.6	<0.05 *
Improving methods of effective communication	0	0.0	30	54.5	25	45.5	3	3.8	40	50.0	37	46.3	2.1	>0.05
Decrease hospital acquired infection	0	0.0	24	43.6	31	56.4	6	7.5	37	46.3	37	46.3	4.8	<0.05 *
Safety uses of drugs which highly dangerous	0	0.0	24	34.6	31	56.4	22	27.5	28	35.0	30	37.5	18.3	<0.00 1**
Decrease child fall down injuries	0	0.0	31	56.4	24	43.6	0	0.0	40	50.0	40	50.0	1.4	>0.05

* * = Adjusted chi squ. test

Table (3): Percentage distribution of the studied nurses regarding their perception about Overall Perceptions of child Safety.

Item													X^2	*P* value
	Staff nurses N=135						Studied head nurses N=32							
	Agree		uncertain		Disagree		Agree		uncertain		Disagree			
	No	%	No	%	No	%	No	%	No	%	No	%		
Child safety is never sacrificed to get more work done	0	0.0	1	.7	134	99.3	26	81.3	6	18.8	0	0.0	16.4	<0.001**
Nurses procedures and systems are good at preventing errors from happening	64	47.4	40	29.6	31	23.0	22	68.8	0	0.0	10	31.3	12.4	<0.001**
It is just by chance that more serious mistakes don't happen around here.	11	8.1	62	45.9	62	45.9	19	59.4	10	31.3	3	9.4	47.9	<0.001**
Nurses have child safety problems in this unit.	5	5.9	56	41.5	71	52.6	12	37.5	20	62.5	0	0.0	40.8	<0.001**

Table (4): Percentage distribution of the studied nurses regarding their Overall Perceptions of child Safety

Item													X^2	*P* value
	Medical unit						Critical unit							
	Agree		uncertain		Disagree		Agree		Uncertain		Disagree			
	No	%	No	%	No	%	No	%	No	%	No	%		
Child safety is never sacrificed to get more work done	0	0.0	1	1.8	54	98.2	0	0.0	0	0.0	80	100	8.1	<0.05*
Our procedures and systems are good at preventing errors from happening	18	23.7	20	36.4	17	30.9	46	57.5	20	25.0	14	17.5	0.12	>0.05
It is just by chance that more serious mistakes don't happen around here.	4	7.3	26	47.3	25	45.5	7	8.8	36	45.0	37	46.3	13.8	<0.001**
Nurses have child safety problems in this unit.	8	14.5	23	41.8	24	43.6	0	0.0	33	41.3	47	58.8	2.8	>0.05

Table (5): Percentage distribution of the studied nurses regarding their Perceptions about organizational Learning, continuous Improvement .

Item	Studied subject												X^2	*P* value
	Medical unit n=55						Critical unit n=80							
	Agree		Uncertain		Disagree		Agree		uncertain		Disagree			
	No	%	No	%	No	%	No	%	No	%	No	%		
Nurses are actively doing things to improve child safety.	7	12.7	20	36.4	28	50.9	6	7.5	22	27.5	52	65.0	1.2	>0.05
Mistakes have led to positive changes here.	9	16.4	20	36.4	26	47.3	8	10.0	33	41.3	39	48.8	10.4	<0.05*
After nurses make changes to improve child safety, we evaluate their effectiveness	1	1.8	23	41.8	31	56.4	16	20.0	32	40.0	32	40.0	5.5	<0.05*

Table (6): Percentage distribution of the studied nurses regarding their perception about communication Openness

Item	Studied subject												X^2	*P* value
	Medical unit n=55						Critical unit n =80							
	Agree		uncertain		Disagree		Agree		uncertain		Disagree			
	No	%	No	%	No	%	No	%	No	%	No	%		
Staff will freely speak up if they see something that may negatively affect child care.	18	32.7	27	49.1	10	18.2	15	18.8	49	61.3	16	20.0	3.5	>0.05
Staff feels free to question the decisions or actions of those with more authority.	27	49.1	18	32.7	10	18.2	45	56.3	26	32.5	9	11.3	1.4	>0.05
Staff are afraid to ask questions when something does not seem right.	15	27.3	10	18.2	30	54.5	20	25.0	7	8.8	53	66.3	3.09	>0.05

(*) Statistically significant at $p<0.05$

Table (7): Percentage distribution of the studied nurses regarding their performance about children safety measures

Item	Studied subject												X^2	*P* value
	Staff nurse n=135						Head nurse n=32							
	Complete Done		Incomplete done		Not done		Complete Done		Incomplete Done		Not done			
	No	%	No	%	No	%	No	%	No	%	No	%		
Hand washing	63	46.7	36	26.7	36	26.7	22	68.8	9	28.8	1	3.1	8.9	<0.05*
Infection control precaution.	72	53.3	35	25.9	28	20.7	18	56.3	11	34.4	3	9.4	2.5	>0.05
Intravenous infusion.	65	48.1	33	24.4	37	27.4	18	56.3	12	37.5	2	6.3	6.9	<0.05*
Medication safety.	42	31.1	24	31.1	51	37.8	19	59.4	11	34.4	2	6.3	13.8	<0.001**
Injury prevention.	59	43.7	35	25.9	41	30.4	20	62.5	9	28.1	3	9.4	6.3	<0.05*
Monitor respiratory status.	70	51.9	23	17.0	42	31.1	22	68.8	9	28.1	1	3.1	10.8	<0.05*
oxygen therapy (nasal cannula, ventilator).	70	51.9	25	18.5	40	29.6	21	65.6	9	28.1	2	6.3	7.6	<0.05*
Nebulizer inhalation.	51	37.8	37	27.4	47	34.8	20	62.5	9	28.1	3	9.4	9.3	<0.05*
Suctioning	15	11.1	39	28.9	81	60.0	21	65.6	8	25.0	3	9.4	48.9	<0.001**
Fire prevention.	29	21.5	54	40.0	52	38.5	22	68.8	7	21.9	3	9.4	27.9	<0.001**

Table (8): Correlation among studied staff nurses total knowledge, perception, and performance scores.

Score	Correlation	
	R	*P* value
Total performance & Total knowledge	**0.294**	**>0.05**
Total perception & total knowledge	**0.285**	**>0.05**
Total perception & total performance	**0.072**	**>0.05**

Table (9): Correlation among studied head nurses total knowledge, perception, and performance scores.

Score	Correlation	
	R	*P* value
Total performance & Total knowledge	**0.119**	**>0.05**
Total perception & total knowledge	**0.053**	**>0.05**
Total perception & total performance	**0.065**	**>0.05**

4.Discussion

The present study was undertaken to assess nurses' perceptions of child safety measure and developing an improvement plan to enhance child safety measures.

Regarding socio demographic characteristics of the studied subjects, the result of the present study indicated that nearly two third of staff nurses (63.2%) age ranged between (20 - <25) years. Results also showed that 90.4%of the staff nurses respectively held a diploma degree of while (90.6) of head nurses had a Bachelor degree in nursing. This finding was supported by the finding of ***Markowitz (2009)*** who found that more than four fifth of nurses (90.4%) diploma of secondary technical nursing school and age of more than half of them was ranged between>20 - <25 years.

In relation to the years of experience of the studied subjects, the finding of the current study showed that 40.6% of the head nurses and 43% of staff nurses had experience between 5-<10 years in nursing. This finding is similar to results of ***Markowitz, (2009)*** who found that, more than one third (38.6) of the studied nurse had years of experience>9years.

Regarding direct contact with children, the finding of the current study showed that, the majority of the studied subjects (98.5%) had direct contact with children. this finding is similar to results of ***Gaborro (2005):*** who found that, the majority of the staff nurses (94.6%) had direct contact with child.

According to attendance of training programs, the present study showed that, the majority of studied subjects (78%) not attending training programs, this finding was agreed with ***Miller (2010)*** who found that the majority of the nurses not attending training programs about safety this may be due to improper provision of training programs conduction, and lack of supervisor awareness about the importance of safety. The training program play important role in enhancing child safety and updating the nurse knowledge and practice, beside improving safety of care given to the child. The researcher believes that attending training programs by nurses specially in pediatrics unit is crucial to provide safety of nursing care.

In relation to perception of the studied nurse about child identification correct way, the present study revealed that half of the studied staff nurse don't know hospital policy regarding child identification correct way This finding was disagree with ***National Patient Safety Foundation (2013),*** who pointed out that the nurse should use at least two identifier when providing care, treatment and services to eliminate transfusion errors related to child misidentification

According to studied nurses perception regarding hospital polices to reduce hospital acquired infection, the present study revealed that 46.3% of the studied staff nurse in critical unit don't know hospital policy about decrease hospital acquired infection, while more than half 56.4%of the studied staff nurse in medical unit don't know policy about decrease hospital acquired infection. This finding was disagree with ***National Patient Safety Foundation (2013)***, who mentioned that the nurse should comply with hand-hygiene guidelines of WHO, Prevent infections due to multi-drug-resistant organisms and Prevent central-line-associated blood stream infections.

Regarding their Perceptions about organizational Learning—Continuous Improvement of the study subjects. The present study revealed that there is a statically significant relation between studied staff nurses perception regarding that mistakes have led to positive changes, after they make changes to improve child safety, they evaluate their effectiveness. And their working site.which answers the first research question. The reason behind this could be simply explained as training and ongoing educations are usually directed to critical care unit nurses more than other unit's nurses. Similarly, a study done by ***Ahmed (2002)*** reported that, most of the training required by nurses was in the area of critical care unit.

Regarding relation between both studied staff nurses working in medical and critical care unit regarding their perception about Overall Perceptions of child Safety the result of the present study shows that 98.2%, 43.6% of the studied staff nurse in medical unit disagree that child safety is never sacrificed to get more work done and, they had child safety problems in their unit.100%, 17.5% of the studied nurses in critical unit disagreed that child safety is never sacrificed to get more work done and, their procedure and systems are good at preventing errors from happening shows that there is a statically significant difference between studied staff nurses perception regarding child safety is never sacrificed to get more work done and their working site (p<0.05).

This may be attributed to that, the critical care units' work which needs more supervision and compliance to safety standards because of the critical condition of children. As well, this finding could be due to that, the environment of critical area necessitates the supervision to be stronger and harder than in the general units. This finding is supported by ***Ahmed, (2002),*** who concluded that, nurses working in critical areas or units always work under stress and busy tone.

In relation to the performance of staff nurses about child safety measures. the present study reveals that 41.8% the studied nurse in medical unit incompetent done hand washing while 68.8% the studied nurse in critical unit complete done hand washing This finding was supported by ***Anthony (2008),*** who found that the majority of the nurses ha0d incompetent level of hand washing performance, this might be due to hand washing was not followed routinely in most of the nursing procedures, due to insufficient or lack of training programs in the infection control in addition to ***Flin*** who found that hand washing was the most single effective procedure a nurse could perform to reduce spread of infection and should be performed before and after each nursing procedure.

Regarding the performance of staff nurses about suction. the present study reveals that98.2% the studied nurse in medical unit had not done of safety of nursing care regarding suction procedure while 33.8% the studied nurse in critical unit had not done of safety of nursing care regarding suction procedure this finding agreed with ***Mahlmeiste.(2003***) who found that the majority of the nurses had poor performance of suction this may be due to lack of training program. This finding was supported by finding of Abbas ***(2002),*** who found that no one of nurses' practice and their poor quality of nursing care may be attributed to absence of special programs to improve the safety of nursing care.

The second research question was confirmed by that, there are significant differences between staff nurses' and head nurses' perception of child safety. The highest percentage of head nurses had agreed responses toward most of the dimensions. The reason behind that may be due to that head nurses were satisfied with their units and had a feeling that they apply more control, since they might have higher expectations for the child safety on their units. This could be also due to that head nu rses are frontline nurses in the organization and they usually recognize the importance of child safety.

Regarding correlation among studied staff nurses total knowledge, perception, and performance scores about child safety. The present study reveals that there is a positive correlation between total knowledge, perception and performance score of the studied staff nurses this finding is in accordance with **Abd al Rahman (2004)**, who found that, There was statically significant relation between total knowledge, perception and performance. This can be explained in the light of ***Caroll (2005),*** who mentioned that the formal training courses plays an important role in enhancing and updating nurses' this knowledge, perception and performance beside improving the quality of care given to child.

Conclusion:

Based on the important findings the present study pointed out that, nurses perceive child's safety positively and there was a statistically significant difference between nurses working in critical of pediatric care units and nurses working in medical of pediatric unit regarding there perception of child safety. Also, there are a statistically significant difference between staff nurses and head nurses regarding there perception of child safety.

Recommendations:

In the light of the results of the present study, the following recommendations can be suggested:-

1. Developing and updating universal protocols and guidelines about safety aspect.
2. Developing and disseminating procedures for child safety among all nursing staff to assure the compliance with all appropriate standards.
3. Staff development programs should be conducted for nurses at all levels to be aware of the significance of child safety in their work areas.
4. Hospital should provide availability of policy for reporting as incident report and complains promote of child safety. and availability of infection control team in hospital and promoting of written policy to infection control.
5. Create a committee to monitor child safety in hospital and hospital should provide supplies and equipment as ID band and beds with rails
6. Supporting more research efforts particularly in areas that yield the greatest benefit and that more effectively contribute to improving child' safety and safe child' lives.
7. Suggested health education program should be conducted to enhance child safety and improve nurse's perception about child safety.

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