



A Descriptive study to assess the knowledge regarding selected pediatric emergencies among staff nurses at selected pediatric hospitals, Kolhapur

Gayatri Parab¹, Swapnali Parab², Suchitra Parit³, Snehal Patil⁴, Kalyani Pujari⁵, Asma Mujawa⁶

¹⁻⁵ Final Yr Student of Bsc Nursing Savitribai Phule CON, Kolhapur, Maharashtra, India

⁶ Associate Professor, Savitribai Phule CON, Kolhapur, Maharashtra, India

Abstract

The childhood period is vital because of socialization process by transmission of attitude, customs and behavior through the influence of family and Community. In India about 35% - 40% of total population is children below 15 years of age. This group is considered as special risk group as they are vulnerable to various health problems. Children always need special care to survive. Children are not like adult, physiologic, cognitive and psychosocial differences affect child's perception reaction to the illness or injury, communication pattern and coping abilities. To determine child health status and individual needs, knowledge of normal growth and development, careful observation of behavior and physiologic cues and listening to the primary care givers are important. A pediatric emergency is a serious condition that threatens the life of an infant, child, teen or young adult, thus requires immediate medical attention. Pediatric emergencies can be caused a particular illness, an injury or by ingesting a foreign object or poison. Burns are common and serious childhood injury causing prolonged effect on growing child with various complications and fatal prognosis. Accurate assessment of a child with an acute illness or injury requires special knowledge and skills. The majority of children presenting in the ED have mild moderate illness and injury and remain alert. About one in four children under the age of 16years will attend emergency department (ED) at some time in their childhood. The pediatric emergency care applied research network was developed to increase pediatric research. However; participation by emergency nurse has been limited.

Research statement: A Descriptive study to assess the knowledge regarding selected pediatric emergencies among staff nurses at selected pediatric hospitals, Kolhapur.

Objectives of study

- To assess the knowledge regarding pediatric emergencies among staff nurses.
- To find out an association between knowledge score with selected sociology -Demographic Variables.

Research Methodology: In the present study Descriptive survey approach is used to assess knowledge regarding pediatric emergencies among staff nurses of selected pediatric hospital. Survey research design is used. 50 samples were selected. Purposive sampling technique was used. Data was collected by semi structured questionnaire. The knowledge score was classified into 3 categories. Good, average and poor. Descriptive and inferential statistics was used to analyze data and for interpretation. Association of knowledge regarding pediatric emergencies with selected demographic variables was assessed using chi-square test. 4% staff nurses having good knowledge about pediatric emergencies. 50% staff nurses were having average knowledge about pediatric emergencies and 46% staff nurses were having poor knowledge about pediatric emergencies.

Result: 4% staff nurses having good knowledge about pediatric emergencies. 50% staff nurses were having average knowledge about pediatric emergencies and 46% staff nurses were having poor knowledge about pediatric emergencies. Chi-square test is there is significant association between knowledge and age, sex, Residence of staff nurses, qualification, experience of staff nurses, pediatric experience of staff nurses, experience of managing pediatric emergencies and research experience of staff nurses, we're found significant at 0.0003 levels.

Conclusion: Result of this current study suggests that we should need to continuing education and clinical experience helps to staff nurses gain knowledge and prevent complication.

Keywords:

Introduction

Child is a unique individual, he or she is not a miniature adult not a little man or woman. The childhood period is vital because of socialization process by transmission of attitude, customs and behavior through the influence of family and Community.

Accurate assessment of a child with an acute illness or injury requires special knowledge and skills. The majority of children presenting in the ED have mild moderate illness and injury and remain alert. About one in four children

under the age of 16years will attend emergency department (ED) at some time in their childhood.

The development of a country can be determined by estimating the health status of children in that country. Children are the major consumers of health care. In India about 35% - 40% of total population is children below 15 years of age. This group is considered as special risk group as they are vulnerable to various health problems. Children always need special care to survive.

A high proportion of these children will be under the age of

five years and above 65% of them will have sustained some kind of trauma. Most Often, the pediatric department is integrated into the general emergency department which has equipment and supplies to evaluate and care for children but no specific section or staff assigned to this care. Children are not like adult, physiologic, cognitive and psychosocial differences affect child’s perception reaction to the illness or injury, communication pattern and coping abilities. To determine child health status and individual needs, knowledge of normal growth and development, careful observation of behavior and physiologic cues and listening to the primary care givers are important. To facilitate positive outcomes, health care provider needs to understand the unique characteristics of the children.

A pediatric emergency is a serious condition that threatens the life of an infant, child, teen or young adult, thus requires immediate medical attention. Pediatric emergencies can be caused a particular illness, an injury or by ingesting a foreign object or poison. Burns are common and serious childhood injury causing prolonged effect on growing child with various complications and fatal prognosis. Approximately one fourth of burns cases are below 10yr of age and about 65% of burn. Children are below 5yr of age over 80% burn accidents occur in the child’s own home. Scalds from hot liquids constitute maximum numbers and other are due to flame burns, electrical or chemical burns. Burns are the tissue injury caused by the contact with heat, flame, chemical, electricity and radiation.

Children are fond of putting object into various orifices either their own or other’s due to curiosity or innocence, during the oral phase of psychosocial development and thereafter object inserted into the nose, ears, anus, vagina are usually easy to manage but foreign body in the mouth can be difficult and often life threatening because they may track down into the respiratory tract or in the alimentary tract foreign bodies in the eyes may also create serious problem but in the soft tissue may be manage easily.

Safety measures are important aspect of child care to minimize the accidental hazards. According to WHO, an accident is an event, independent of human will, caused by an outside force acting rapidly and resulting in physical and mental injury. During childhood, age and sex differences for rates of accidental injury are frequently reported. Vehicular accident, false, drowning, burns and ingestion are found to be common agents of injury to pediatric patients. The home affords a virtual breeding ground for accident to children;

however, parents also play an important role in the child’s environment, with their illness, preoccupation or disposition to (in) action having consequences which may eventuate in injury.

Emergency nursing care is a specially designed and equipped facility, staffed by skilled personnel to provide effective and safe care for dependent patients with life threatening or partially life threatening problems. The nurses should have additional education in health assessment, diagnosis, management of illness and injuries including ordering and integrating the results of the test and prescribing medication. Their practices emphasize health promotion and illness prevention. The concept of Emergency Nursing Care took its root from Florence Nightingale who is the founder of Modern Nursing. She placed seriously ill patients near the nurses’ station for closer and better observation and care.

Objective of study

- To assess the knowledge regarding pediatric emergencies among staff nurses.
- To find out an association between knowledge score with selected sociology -Demographic Variables.

Research Approach: - Descriptive survey approach, Research Design: - Survey research design, Setting of Study:-Selected pediatric hospitals, Population:-50 Registered staff nurses, Sampling Technique: - Purposive sampling.

Inclusive Criteria

- Registered Staff nurses of selected pediatric hospitals
- Who all are willing to participate
- Who all are will be present during data collection
- Who will understand Marathi and English

The tool will be consisting of two sections

Section A: Socio demographic variable for e.g. Age, sex, qualification, Area of Residence, Year of Experience, Pediatric Experience, Experience in managing pediatric emergencies, Research Experience.

Section B: Semi structured questionnaire to assess knowledge of pediatric emergency.

Data will be collected through Semi structured questionnaire to assess knowledge of pediatric emergencies.

Results

Table 1: N=50

Sr. No.	Demographic variables	Frequency	%
1: Distribution of samples according to their age.			
	21 to 25years	14	28%
	26 to 30 years	16	32%
	31to 35years	10	20%
	36 and above 36	10	20%
.2: Distribution of samples according to the sex			
	Male	11	22%
	Female	39	78%
3: Distribution of samples according to their area of Residence.			
	Rural	28	56%
	Urban	22	44%
.4: Distribution of samples according to their Qualification.			
	ANM	32	64%

	GNM	16	32%
	B. Sc(N)	2	4%
	M. Sc (N)	0	0%
5: Distribution of samples according Area of Experience			
	Fresher	5	16%
	Two Year	6	12%
	Five Year	13	26%
	Five and above	26	52%
6: Distribution of samples according to Paediatric Experience			
	New	1	14%
	2 to 3 years	10	20%
	3 to 5 years	8	16%
	5 an above	25	50%
7: Distribution of samples according to Experience of managing paediatric emergency			
	Burn	18	36%
	Foreign body	8	16%
	Drowning	1	2%
	Poisoning	13	26%
	Accidental injury	10	20%
8: Distribution of samples according to Research Experience			
	Yes	21	42%
	No	29	58%

Table 2: N=50

Sr. No.	Level of knowledge	Frequency	%
	Poor (1-8%)	23	46%
	Average (9-16%)	25	50%
	Good (17-26%)	2	4%

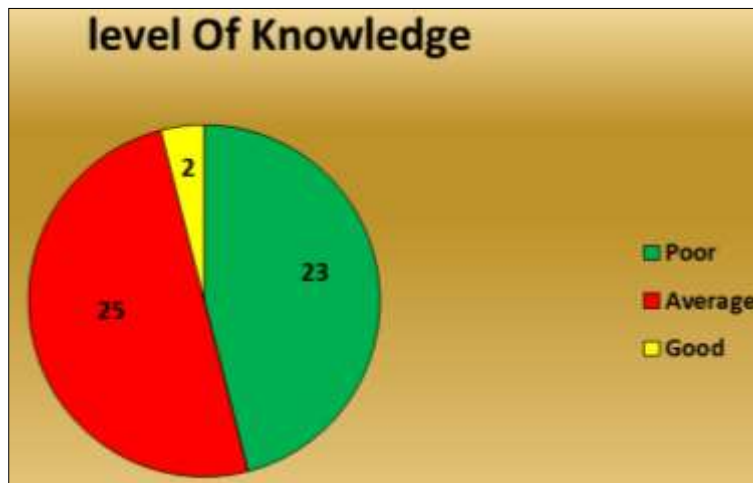


Fig 1: Knowledge level of Staff Nurses

Table 3: Association between knowledge of pediatric emergency among staff nurses with their selected demographic variable.

Age	Good	Avg	Poor	Chi square	Degree freedom	P value
21-25 yrs	0	8	6	5.778	6	0.4485
26-30 yrs	2	6	8			
31-35	0	4	5			
36 & above	0	6	3			
Sex	Good	Avg	Poor	Chi square	Degree freedom	P vlaue
Male	1	6	4	1.257	2	0.5335
Female	1	19	19			
Residence	Good	Avg	Poor	Chi sqaure	Degree freedom	P value
Rural	1	13	14	0.4129	2	0.8135
Urban	1	12	9			
Qualification	Good	Avg	Poor	Chi square	Degree freedom	P value
Anm	0	15	17	5.554	4	0.235
Gnm	2	9	5			
Bsc	0	1	1			
Experience	Good	Avg	Poor	Chi square	Degree freedom	P value
New	0	1	4	3.729	6	0.7132
2yrs	0	3	3			

5yrs	1	6	6			
5 yrs & above	1	15	10			
Peadiatric experience	Good	Avg	Poor	Chisquare	Degree freedom	P value
New	0	2	5	5.267	6	0.51
2-3yrs	1	6	3			
3-5yrs	0	3	5			
5yrs & above	1	15	10			
Experience of managing peadiatric emergency	Good	Avg	Poor	Chi square	Degree freedom	P value
Burn	0	10	8	28.917	8	0.0003
Foreign body	0	6	2			
Drowning	1	0	0			
Poisoning	1	5	7			
Accidental injury	0	4	6			
Research	Good	Avg	Poor	Chi square	Degree freedom	P value
Yes	1	12	8	0.9138	2	0.6332
No	1	13	15			

Discussion

the majority of samples were from 16(32%) of them were from 26years to 30years of age, 14(28%) of samples were from age group of 21-25 years of age, 31to 35years of age from 10(20%)and 10(20%) of samples we're from age group of above 36years. the majority of 39(78%) of sample were Female,11(22%) of them were Male. area of residence, rural28 (56%)and Urban 22(44%).the staff nurse qualification the majority 32(64%) of them had ANM,GNM had from 16(32%), B.sc nursing had from 2(4%) new experience 5(16%), two year experience from 6(12%), Five year experience from 13(26%),above five experience from 26(52 new paediatric experience 1(14%), 2 to 3 Years paediatric experience, 10(20%),3 to 5 years paediatric experience, 8(10%), above years experience 25(50%), experience of managing paediatric emergency burn 18(36%), Foreign body8(16%), Drowning 1(2%), Poisoning13(26%), Accidental injury 10(20%),research experience of staff nurses 21(42%) and 29(58%) not having research experience.

Conclusion

4% staff nurses having good knowledge about pediatric emergencies. 50% staff nurses were having average knowledge about pediatric emergencies and 46% staff nurses were having poor knowledge about pediatric emergencies. Chi-square test is there is significant association between knowledge and age, sex, Residence of staff nurses, qualification, experience of staff nurses, pediatric experience of staff nurses, experience of managing pediatric emergencies and research experience of staff nurses, we're found significant at 0.0003 levels.

Reference

1. Lehmann R, Seitz A, Marburg J, Jonshoff B, Huwendiek. To assess real life experiences previous training and the need for training among physician and nurses in Germany BMC Res Notes, 2019.
2. Marian B, Zazyczny KA, Decina P, Warasha L, Synder P, Gallagher E, Hand C, stimulation for clinical preparedness in pediatric emergencies among staff nurse J Nurses Prof Dev, 2019.
3. Crockett LK, Leggett C, Curran JA, Kinsley L, Brockman G, Scott SD. *et al* knowledge sharing between general and pediatric emergency department connection, barriers and opportunities vs National Library of Medicine National institute of Health, 2018.

4. Considine J, Brennan D, "Effect of an evidence_ based pediatric fever education program on emergency nurses knowledge.
5. Chan Gk, Barnason S, Dakin CL, Gillespie G, Kamienski Mc, Stapleton S. *et al*. Barriers and perceived needs for understanding and using research among emergency nurses Emergency nurses association, published by Mosby Inc. year, 2009.
6. MacLean S, Desy P, Juarez A, Perhats C, Gacki-Smith J. Need of Pediatric emergency nurses, PECARN emergency department, J Emergency Nurses, 2006.
7. Hamilton R, Nurses knowledge and skill retention following cardiopulmonary resuscitation training cardiac Hospitals, published in English by J Adv. Nurs, 2005.
8. Sreelakshmy UR, Haseena TA. Knowledge Regarding Management of Selected Medical Emergencies among Registered Nurses: A Cross-Sectional Survey". International Journal of Science and Research (IJSR). 2016; 5(4):448-452.Available from: URL: <https://www.ijsr.net/archive/v5i4/NOV162535.pdf>
9. Dr. VidyaSeshan. Journal of Nursing and Health Science (IOSR-JNHS). 2016; 5(6):50-57.Available from :URL: <https://www.iosrjournals.org>
10. Taneja N, Emmanuel R, Chari PS, Sharma M. A prospective study of hospital-acquired infections in burn patients at a tertiary care referral centre in north India. Burns. 2004; 30(70):6659.
11. Rieman MT, Gordon M. Pediatric nurse's knowledge and attitudes survey regarding pain; a competency tool modification. Pediatric nursing. 2007; 33(4):303-6.
12. Arvind Sehgal, Shilpa Jain, MC Jyothi. Childhood injuries, management and prevention. Indian journal of pediatrics. 2006; 4(7):45-46.
13. Leach SC. Continuing care for critically ill child. Crit care nursling North America. 2004; 3(2):307-17.
14. Parathasathy A. IAP textbook of pediatrics. 4th edition. Jaypee brothers medical publishers pvt ltd.
15. Amrohi Hemant Kumar, Msc Nursing to evaluate effectiveness of information booklet on knowledge regarding selected peadiatic emergency among staff nurses, 2016, 2017.
16. BlessyAbraham Ms, Assessment of the effectiveness of self-instructional module on knowledge regarding Pediatric emergencies among staff Nurses, 2009.
17. ParulDatta, Pediatric Nursing, second edition, jaypee Brothers, Medical publishers (p) Ltd. 2009; 374-

