



**FIND THE INCIDENCE OF COMPLICATIONS RELATED TO INFUSION THERAPY
AMONG THE CHILDREN ADMITTED AT PAEDIATRIC WARD IN SELECTED HOSPITALS
AT MORADABAD.**

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Abstract: Background of the study: Peripheral infusion is a stressful procedure for children. It is estimated that over 80% of all children entering hospital to receive IV therapy, some of the minor problems were pain, trauma, swelling, joint immobility, but these can lead to life threatening conditions like thrombosis, embolism, variety of infections and so on.

Aim: The main objective of the study was to find the incidence of complications related to infusion therapy among the children admitted at paediatric ward in selected hospitals at Moradabad.

Material and Methods: The descriptive research design was used. The study was conducted at various hospitals of Moradabad, U.P. 100 children's (1-18 years) selected as a sample for the study. Non-probability convenient sampling technique was used for the selection of samples. The tool designed to collect the data were sociodemographic Performa and observational checklist regarding incidence of complications related to infusion therapy.

Results: Data gathered were analyzed by using descriptive statistics in terms of frequency, percentage. The results revealed that out of 100 children were had 82% infection, 41% infiltration, 33% air embolism, 25% hematoma, 7% phlebitis, 4% thrombophlebitis and 1% cellulitis.

Conclusion: This study concluded that majority of incidence of complication related to infusion therapy was infection i.e 82%.

Keywords: Incidence, complications related to infusion therapy, children and paediatric ward.

Introduction: Intravenous or peripheral infusions means introduction of large amount of fluid into the body via veins. It is useful in the

restore fluid volume that is lost from the body due to haemorrhage, vomiting, diarrhoea, drainage, etc, A bolus or a large amount can also be infused without much pain, therefore it is very useful for fluid replacement in dehydration and burns.¹

Children are not little adult, but adults are grown up children. Most of the basic principles of safe administration of IV solutions

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Received on: June 2016

Accepted after revision: August 2016

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and medications are the same, regardless of the patient's age. Some of the very important differences exist in the preparation of the parent's and child, calculation of flow rates,

veins used for infusion, equipment and procedure, methods of protecting the child and the site of infusion.²

Research Methodology:

Research approach	Quantitative approach
Research design	Non-experimental design(descriptive research design)
Setting of the study	Paediatric wards of selected hospitals.
Population	<ul style="list-style-type: none"> • Target population: Children admitted in hospitals at Moradabad. • Accessible population: Children admitted in paediatric wards of selected hospitals at Moradabad.
Sample and sample size	<ul style="list-style-type: none"> • Sample: Children (1-18 years) • Sample size: 100
Sampling technique	Non-randomized sampling (convenient sampling technique)
Variables	<ul style="list-style-type: none"> • Research variable: Complications related to infusion therapy. • Demographic variables: <ul style="list-style-type: none"> ◆ Age, ◆ gender, ◆ weight (in kg), ◆ length of stay in hospital, ◆ Information on IV cannulation ✦ Site of cannula ✦ Size of cannula ✦ Type of fluid and medication infused ◆ How long the catheter in place.

Method of Data Collection: The study was done from 29/01/2016 to 13/02/2016. The subjects were explained about the purpose of the study. Consent was taken from each subject. Data was collected through observational checklist.

Plan for Data Analysis

1. Descriptive statistics used to analyze the variable, frequency and percentage.

Results and Discussion:

Section 1: Description of Sample Characteristics

Table no.1

N=100

Demographic Characteristics		Frequency(f)	Percentage (%)
Age	1-3 years	21	21%
	4-6 years	30	30%
	7-12 years	33	33%
	13-18 years	16	16%
Gender	Male	42	42%
	Female	58	58%
Weight	7kg-15kg	33	33%
	16kg-22kg	33	33%
	23kg-43kg	30	30%
	44kg-52kg	04	04%

Length of stay in hospital	<3 days	17	17%
	4 days-7 days	47	47%
	1 week-2 weeks	29	29%
	More than 2 weeks	07	07%
Site of cannula	Hand	77	77%
	Wrist	18	18%
	Scalp	00	00%
	External jugular	00	00%
	Dorsal foot	05	05%
Size of cannula	18G	05	05%
	20G	18	18%
	22G	56	56%
	24G	21	21%
	26G	00	00%
Type of fluid and medication	<i>Isotonic solution</i>	81	81%
	<i>Hypotonic solution</i>	14	14%
	<i>Hypertonic solution</i>	05	05%
How long the catheter in place	<24hrs	03	03%
	24-48hrs	51	51%
	49-72hrs	46	46%
	4th day and above	00	00%

Section 2: Incidence Of Complications Related To Infusion Therapy

Table no.2

N=100

S. No.	Complications	Frequency(f)	Percentage (%)
1.	Infiltration	41	41%
2.	Phlebitis	07	07%
3.	Thrombophlebitis	04	04%
4.	Hematoma	25	25%
5.	Cellulitis	01	01%
6.	Air embolism	33	33%
7.	Infection	82	82%

Recommendation and Suggestions:

1. Awareness building among staff nurse to make them understand the serious consequences of complications related to infusion therapy.
2. Increased focus on staff nurse while performing cannulation procedure on children.

3. Instruct the parents about their participation in the management and outcome of intravenous infusion, while children receive intravenous infusion therapy.

Acknowledgment:

I wish to acknowledge Principal, my guide and my parents in motivating and encourage me.

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