

# Effectiveness of Selected Nursing Care Modalities on Skin Integrity of Genitalia Among Infants Diagnosed with AGE (Acute Gastro Enteritis) in Pediatric Ward of Selected Hospitals.

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## Abstract

Acute gastroenteritis is a common infectious disease syndrome, causing a combination of nausea, vomiting, diarrhea, and abdominal pain. Acute gastroenteritis usually last fewer than 14 days. Acute gastroenteritis is caused by many infectious agents, but most of the time clostridium difficile is the predominant causative factor. The goal of the study was to assess effectiveness of selected Nursing care modalities on skin integrity of genitalia among infants diagnosed with AGE (acute gastro enteritis) in pediatric ward of selected hospitals. Methodology: The current research was designed to assess the effectiveness of selected Nursing care modalities on skin integrity of genitalia among infants diagnosed with AGE (acute gastro enteritis) in pediatric ward of selected hospitals. This research employed a Quasi experimental research design as well as one group pre test post test control group design. The research was carried out among 30 infants in pediatric ward of selected hospitals by using a non-probability purposive sampling technique. The information was gathered using a demographic characteristics and self structured observational checklist to assess skin integrity of genitalia. Result: The study's summary, conclusion, implications for nursing and health care services, and limitations are all included in this chapter. The ideas and proposals for additional research in this area round out this chapter. The purpose of the current study was to evaluate the impact of particular nursing care modalities on the skin integrity of the genitalia in newborns with acute gastroenteritis in pediatric wards at particular institutions.

**Key Words:** effect, selected nursing care modalities, skin integrity, infant, acute gastro enteritis.

## Introduction

Acute gastroenteritis is a common infectious disease syndrome, causing a combination of nausea, vomiting, diarrhea, and abdominal pain. Acute gastroenteritis usually last fewer than 14 days. Acute gastroenteritis is caused by many infectious agents, but most of the time clostridium difficile is the predominant causative factor. Infants suffering from acute gastroenteritis may get affected with impaired fluid and electrolyte balance caused by continuous diarrhea & vomiting. This results in impaired skin integrity of genitalia with evidence of skin rash. There are variety of nursing care modalities used to maintain the skin integrity which may include lukewarm water wash, positioning, intake & output monitoring, application of breast milk etc. Doctor even may prescribe application of petroleum jelly, zinc oxide gel, nystatin ointment, wood wax alcohol etc.

## Need Of The Study

The infants who are suffered from acute gastro enteritis may accompany severe diarrhea and other health issues also, in that the most common thing is impaired skin integrity of genitalia because of continues wearing a diaper and wipe the genital area for cleaning purpose, due to this the skin of genital area becomes continuously wet and

it leads to skin rash, etching, redness, dryness at the perineal area and to reduce this impaired skin integrity of genitalia, researcher will use the some selected nursing care modalities in that first is the lukewarm water wash with dabbing of genitalia of infant after each motion, second is providing positioning according to the convenience of the infant and third is the open ventilation and forth is use of soft cotton cloths to cover the genitalia of that sample and after the administration of these nursing care modalities researcher will assess the skin integrity of genitalia of infant who are diagnosed with acute gastro enteritis in selected hospitals in Pune.

### Methodology

The current research was designed to assess the effectiveness of selected Nursing care modalities on skin integrity of genitalia among infants diagnosed with AGE (acute gastro enteritis) in pediatric ward of selected hospitals. This research employed a Quasi experimental research design as well as one group pre test post test control group design. The research was carried out among 30 infants in pediatric ward of selected hospitals by using a non-probability purposive sampling technique. The information was gathered using a demographic characteristics and self structured observational checklist to assess skin integrity of genitalia. The scores were classified as Mild impaired skin (score 0- 2), Moderate impaired skin (score 3 - 5), Sever impaired skin of genitalia (score  $\geq 6$  ), Data collection is the process of recruiting participants and gathering information for research. Administrative approval was acquired in writing. To ensure a truthful answer, the chosen participants were informed about the objective and use of the research and ensured of the anonymity of their replies. Each participant in the research provided written informed permission.

### Results

#### SECTION I - Description of samples based on their demographic characteristics.

##### AGE

In experimental group, 46.7% of the integrity of genitalia among infants diagnosed with AGE admitted in pediatric ward had age up to six months and 53.3% of them had age 6 to 12 months. In control group, 53.3% of the integrity of genitalia among infants diagnosed with AGE admitted in pediatric ward had age up to six months and 46.7% of them had age 6 to 12 months.

##### GENDER

In experimental and control group, 46.7% of them were females and 53.3% of them were males.

##### DAY OF DIARRHEA

In experimental group, 66.7% of them had diarrhea for 2 days and 33.3% of them had diarrhea from 3 days. In control group, 46.7% of them had diarrhea for 2 days and 53.3% of them had diarrhea from 3 days.

##### FREQUENCY OF WATERY MOTION

In experimental and control group, 13.3% of them had 3 to 6 watery motions, 26.7% of them had 7 to 10 watery motions, 33.3% of them had watery motions 11 to 14 times and 26.7% of them had watery motions 15 to 18 times.

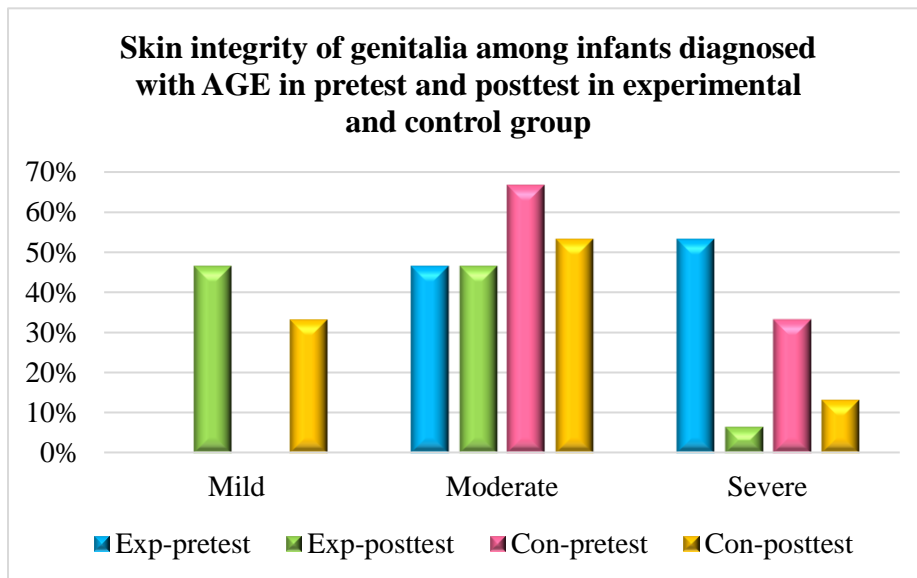
#### SECTION II - Analysis of data related to skin integrity of genitalia among infants diagnosed with AGE before administration of selected Nursing care modalities

In experimental group, 46.7% of the infants diagnosed with AGE had moderate skin integrity and 53.3% of them had severe skin integrity. In control group, 66.7% of the infants diagnosed with AGE had moderate skin integrity and 33.3% of them had severe skin integrity.

#### SECTION III - Analysis of data related to skin integrity of genitalia among infants diagnosed with AGE after administration of selected Nursing care modalities

	Experimental	Control
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Skin integrity	Pretest		Posttest		Pretest		Posttest	
	Freq	%	Freq	%	Freq	%	Freq	%
Mild	0	0.0%	7	46.7%	0	0.0%	5	33.3%
Moderate	7	46.7%	7	46.7%	10	66.7%	8	53.3%
Severe	8	53.3%	1	6.7%	5	33.3%	2	13.3%

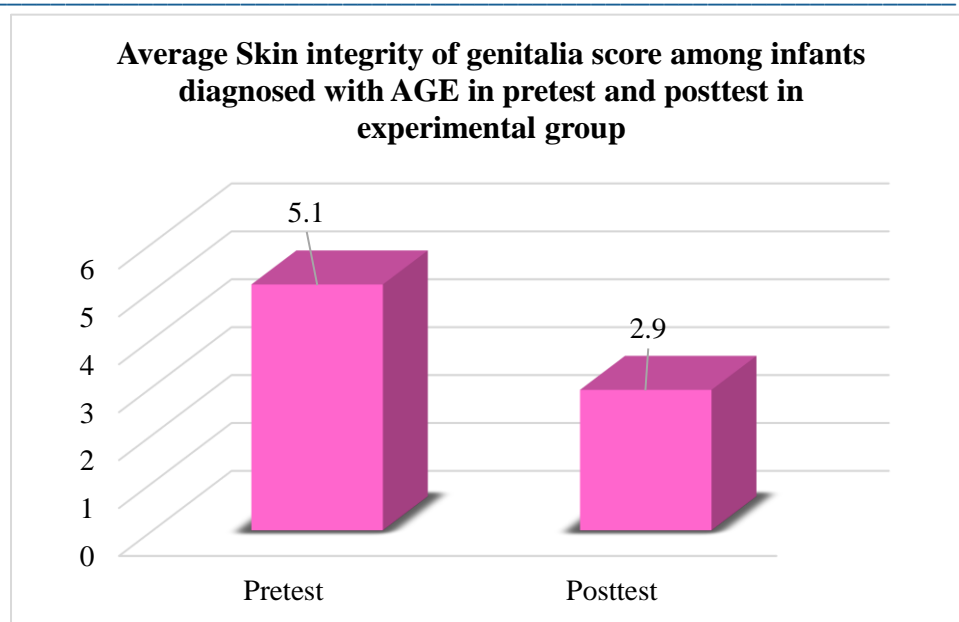


In experimental group, in pretest, 46.7% of the infants diagnosed with AGE had moderate skin integrity and 53.3% of them had severe skin integrity. In posttest, 46.7% of them had mild skin integrity, 46.7% of them had moderate skin integrity and 6.7% of them had severe skin integrity.

In control group, 66.7% of the infants diagnosed with AGE had moderate skin integrity and 33.3% of them had severe skin integrity. In posttest, 33.3% of them had mild skin integrity, 53.3% of them had moderate skin integrity and 13.3% of them had severe skin integrity.

#### SECTION IV - Analysis of data related to comparison of pretest and posttest skin integrity following administration of selected Nursing care modalities

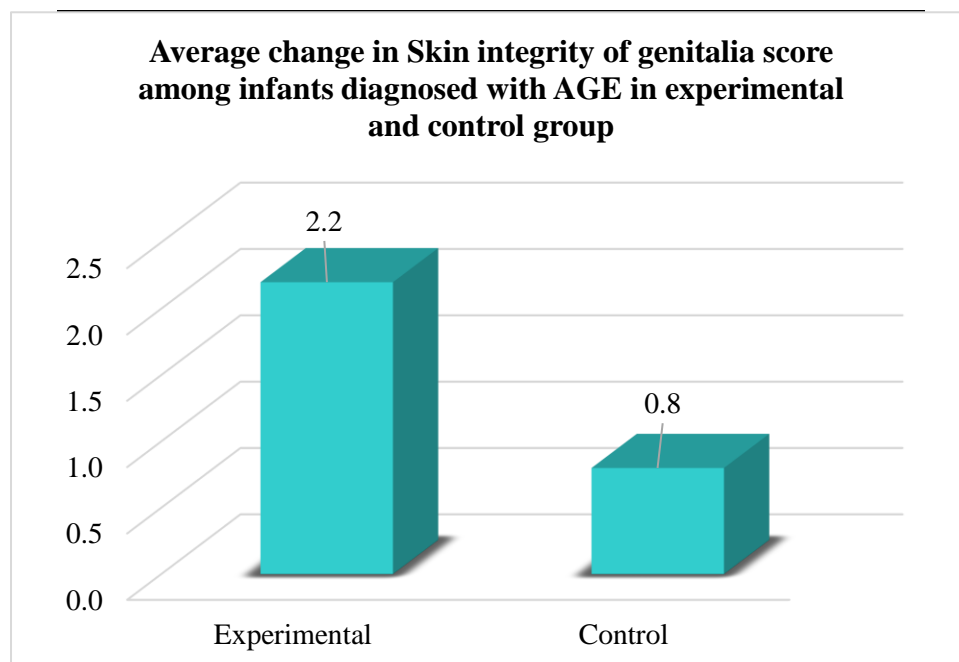
	Mean	SD	T	df	p-value
Pretest	5.1	1.1	5.8	14	0.000
Posttest	2.9	1.4			



Researcher applied paired t-test for the comparison of pretest and posttest skin integrity among the infants diagnosed with AGE. Average skin integrity score in pretest was 5.1 which reduced to 2.9 in posttest. T-value for this test was 5.8 with 14 degrees of freedom. The corresponding p-value was small (less than 0.05), the null hypothesis is rejected. It is evident that the selected Nursing care modalities were significantly effective in improving skin integrity among infants diagnosed with AGE.

**Two sample t-test for the comparison of pretest and posttest skin integrity following administration of selected Nursing care modalities**

Group	Mean	SD	T	df	p-value
Experimental	2.2	1.5	2.7	28	0.005
Control	0.8	1.3			



Above table and graph shows that researcher applied two sample t-test for the comparison of change in skin integrity scores among infants diagnosed with AGE in experimental and control group. Average change in skin integrity score in experimental group was 2.2 which was 0.8 in control group. T-value for this test was 2.7 with 28 degrees of freedom. The corresponding p-value was small (less than 0.05), the null hypothesis is rejected. Average reduction in skin integrity score is higher in experimental group than that in control group. It is evident that administration of selected Nursing care modalities were significantly effective in improving the skin integrity among infants diagnosed with AGE.

### Discussion

Any research study be considered complete till the research findings have been propagated among concerned fraternity and other significant people. This chapter offers a concise synopsis of the investigation and its conclusions. Together with recommendations for additional research, it offers recommendations, important results, discussion points, and study implications for nursing service, nursing research, nursing education, and nursing administration. The study we conducted with the purpose to assess the effectiveness of selected Nursing care modalities on skin integrity of genitalia among infants diagnosed with AGE (acute gastro enteritis) in pediatric ward of selected hospitals.

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**Conflict of interest:** There are no conflicts of interest.

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