



THE EFFECTIVENESS OF BRASTEFEEEDING ON PAIN RESPONSE ASSESS DURING INTRAMUSCULAR INJECTION AMONG INFANTS

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ABSTRACT

Introduction and background of the study: Pain is a distressing feeling often caused by intense or damaging stimuli. It is too difficult to face pain of injection in infants. Breastfeeding offers a painless injection experience. It provides a mechanical stimulation and distraction during vaccination and thus helps to reduce pain during intramuscular injection¹.

Methodology: The Quasi experimental research design was used for the study. 62 children below age of 1 year who were receiving intramuscular injection in selected paediatric hospitals of Gujarat were selected by non-probability convenient sampling technique and then randomly allocated to experimental and control group (31 control and experimental groups). Data was collected by using FLACC scale to assess the pain level during intramuscular injection. The data was analyzed by using Descriptive and Inferential statistics such as Frequency, Percentage distribution, Two sample t test and Chi square test.

Results: There was statistically significant difference found between the level of pain among experimental and control group calculated by Two sample t test 18.92 at the p-value <0.001 level of significance.

Conclusion: Study concluded that there was significant difference between the level of pain among experimental and control group. Hence, the breastfeeding showed significant effect on pain level during intramuscular injection among infants. All the mothers can give breastfeeding in routine practices for reducing pain intensity.

KEYWORDS : Effectiveness; breast feeding; Pain; Infants; intramuscular injection

INTRODUCTION

An infant is the word derived from the Latin word "Infants", meaning "unable to speak" or "speechless". Infants cry as a form of basic instinctive communication. A crying infant may be trying to express a variety of feelings including hunger, pain or discomfort, overstimulation, boredom, wanting something or loneliness.²

Pain is an unpleasant sensory and emotional experience associated with actual or potential damage or described in terms of such damage. Routine vaccination is an inherent part of the health care delivery system as it is an effective health intervention in reducing the infant morbidity and infant mortality. During childhood, immunization injections are the most common sources of iatrogenic pain. Intramuscular immunization is administered repeatedly throughout infancy, childhood and adolescence. Pain from vaccine injections is a source of anxiety and distress for vaccinators, children and their parents and if not addressed, can lead to pre-procedural anxiety at future medical fears, and health care avoidance behaviors including non-adherence with immunization schedules. It is estimated that up to 25% of adults have needle fears. Most of the injectable vaccines are administered in the first year of the child-life which produces pain and distress among children³.

New born communicate pain only through behavioural and physiological changes. Neonates signify the beginning of the life as an independent individual. It is the single most hazardous period of life confronted with dramatic challenges due to transition from dependent intra uterine existence to independent extra uterine life.

Injections can be painful. Kids don't like them, and parents don't like seeing their children suffer⁴. Fear of needles is a common phobia for children. Children have fear to the injections and because of that fear they are crying. All parents are continually striving to find the best way to respond to those cries⁵. Some mothers may need help controlling their own distress and interpreting babies' crying as an attempt to communicate need or discomfort⁶.

Injections are the most frequently used medical procedure, with an estimated 12 billion administered throughout the world on an annual basis. Of these 5% or less are for immunization and rest are given for curative purposes. In India, a survey conducted found that 96% of all

injections given by private doctors were of antibiotics, vitamins and analgesics. Intramuscular injection can be an unpleasant experience for children, making an appropriate explanation and psychological support necessary.

MATERIAL AND METHODS

A quantitative approach was used for the study. The quasi experimental research design was adopted to conduct the research study. The objectives of the study were to assess the level of pain during intramuscular injection of experimental group as well as control group with breastfeeding, to compare the level of pain during intramuscular injection of both groups and to find out association between level of pain during vaccination with their selected demographic variables of experimental group. The target population were children whose age is below 1 year and receiving intramuscular injection from selected paediatric hospitals of Gujarat including Ahmadabad, Anand and Vadodara. Using non probability convenient sampling technique 62 infants were selected and randomly allocated in experimental and control group (31 each). A standardized FLACC pain scale was selected to assess effectiveness of breastfeeding on pain during intramuscular injection among infants.

RESULT

The data was analyzed using descriptive and inferential statistics. Two sample T-test was used to determine the effect of breastfeeding on pain response during intramuscular injection. Chi square test was used to analyse the association between level of pain during vaccination with their selected demographic variables of experimental group.

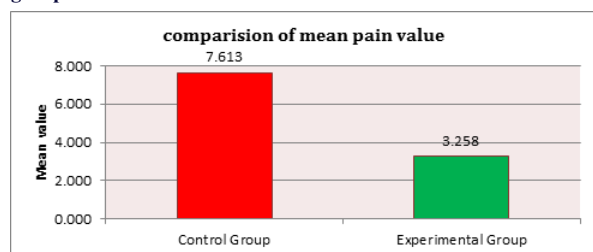
Table No.1:

Table no. 1: Comparison between level of pain during vaccination in experimental and control group

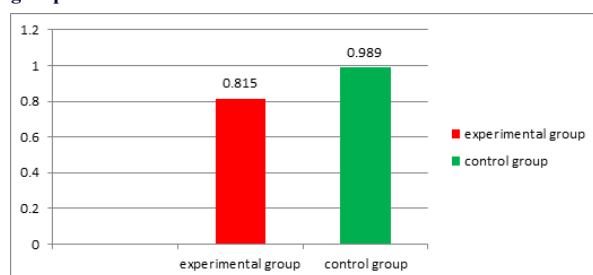
Group	N	Mean	SD	Mann Whitney test	P value (0.05)
Experimental group	31	3.258	0.815	18.92	<0.001
Control group	31	7.613	0.989		

The data presented in the table no. 1 indicates that there was statistically significant difference found in level of pain during vaccination among experimental and control group done by Two sample T-test 18.92 at the p-value <0.001 level of significance.

Graph No.1: A Bar Graph Showing Mean pain value of subjects as per their pain during vaccination of experimental and control group.



Graph No.2: A Bar Graph Showing standard deviation of subjects as per their pain during vaccination of experimental and control group.



The study results showed the association between level of pain during vaccination with their demographic variables were found not significant as χ^2 calculated value is less than table value.

CONCLUSION

Study concluded that breastfeeding is effective in minimizing pain during intramuscular injection among infants. It should be use in routine practices of giving immunization and intramuscular injections.

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