

## Research Article

### A STUDY ON NURSING INTERVENTION ON CARDIOPULMONARY PARAMETER AMONG CHILDREN WITH PNEUMONIA AT PUDUCHERRY

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#### ARTICLE INFO

##### Article History:

Received 16<sup>th</sup> April 2016  
Received in revised form  
25<sup>th</sup> May 2016  
Accepted 29<sup>th</sup> June 2016  
Published online 31<sup>st</sup> July 2016

##### Keywords:

Nursing Intervention,  
Cardiopulmonary Parameter,  
Pneumonia,  
Children (4-12 yrs)

#### ABSTRACT

**Objective:** To assess the effectiveness of cardiopulmonary parameter among children with pneumonia in experimental and control group; To evaluate the effectiveness of nursing intervention on cardiopulmonary parameter among children with pneumonia in experimental group; To compare the effectiveness of nursing intervention on cardiopulmonary parameter among pneumonia children in experimental and control group pre test and posttest; To associate the nursing intervention on cardiopulmonary parameter among children (4-12 yrs) with pneumonia in selected demographic variables in experimental and control groups. **Results:** In experimental group pre test 0% were in mild level, 15(75%) were in moderate level, 5(25%) severe level, In post test 14(70%) were in mild level, 6(30%) were in moderate level, nil in severe level; In control group pre test nil were in mild level, 12(60%) were in moderate level, 8(40%) were in severe level; post test 5(25%) were in mild level, 10(50%) were in moderate level, 5(25%) were in severe level. **Conclusion** The study reveals that association nursing intervention on cardiopulmonary parameter among children (4-12 yrs) with pneumonia at puducherry to with demographic data. It was statistically significance with the birth order of the children.

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## INTRODUCTION

Children are the nation's supremely important asset for the family and society children are the gift, which has much potential with one, which can be best resources for the nation if developed and utilized well. Illness will not only to physical impairment and functional limitation but also psychological stress resulting in tension and anxiety. Respiratory system is a frequent site of illness in children, respiratory infections and allergies together are responsible for many disruptions in family life and missed from school work. Children respond differently illness than do adult is most respiratory condition are more stressful for the children leading to airway obstruction or respiratory failure. In respiratory tract, lower respiratory tract infection is one of the leading common diseases during childhood. Pneumonia may occur as primary infection or secondary infection. The causative organisms of the infection include: bacterial, viral, mycoplasma, fungal, protozoal and miscellaneous.

There is some classification of pneumonia. Bronchopneumonia is patchy involvement of the lungs. Lobar pneumonia is one or more lobes of lungs involved. Pneumonia is the alveoli or interstitial tissue between them affected.

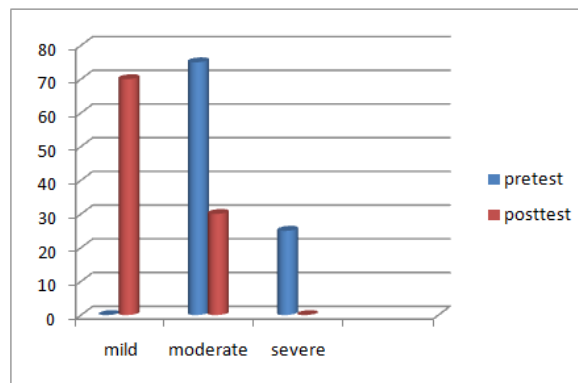
## OBJECTIVES

- To assess the effectiveness of cardiopulmonary parameter among children with pneumonia in experimental and control group;
- To evaluate the effectiveness of nursing intervention on cardiopulmonary parameter among children with pneumonia in experimental group;
- To compare the effectiveness of nursing intervention on cardiopulmonary parameter among pneumonia children in experimental and control group pretest and posttest; d) To associate the nursing intervention on cardiopulmonary parameter among children with pneumonia in selected demographic variables in experimental and control groups.

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**Table 1. Frequency and percentage wise distribution of nursing intervention on cardiopulmonary parameter among pneumonia children(4-12 yrs) in selected demographic variables of pre and post – test in experimental group**

Sl. No.	Cardiopulmonary parameter	Pre test		Post test	
		N	%	N	%
1	Mild level	0	-	14	70
2	Moderate level	15	75	6	30
3	Severe level	5	25	0	-



**Table 2. Frequency and percentage wise distribution of nursing intervention on cardiopulmonary parameter among pneumonia children(4-12 yrs) in selected demographic variables of pre and post - test in control group**

Sl. No.	Cardiopulmonary parameter	Pre test		Post test	
		N	%	N	%
1	Mild level	0	-	5	25
2	Moderate level	12	60	10	50
3	Severe level	8	40	5	25

**Table 3. Comparison of nursing intervention on cardiopulmonary parameter of pre and post test in experimental and control group**

Sl. No	Group	Pre – test		Post – test		Mean difference	‘t’ value	P Value
		Mean	SD	Mean	SD			
1.	Experimental Group	6	1.25	2.13	0.86	3.87	19.3	<0.0001
2.	Control Group	5.53	1.27	3.36	1	2.17	15.21	<0.05

**MATERIALS AND METHODS**

Quantitative approach and quasi experimental research design is used for this study. The sample size of present study is 40 children from that 20 experimental group and 20 control group. The purposive sampling technique was used for the sample. Setting for the study is at SMVMCH in puducherry. The tool used for gather relevant data was structured question to assess the respiratory status . its includes respiratory rate, heart sound, presence of wheezing and uses of accessory muscles among pneumonia children with age group of 4-12 years

Table 1: shows that the nursing intervention on cardiopulmonary parameter among pneumonia children in experimental group pre test nil were in mild level, 15(75%) were in moderate level , 5(25%) severe level , post test 14(70%) were in mild level, 6(30%) were in moderate level , nil in severe level Table 2: shows that the nursing intervention on cardiopulmonary parameter among pneumonia children in control group pre test nil were in mild level, 12(60%) were in moderate level, 8(40%) were in severe level ; post test 5(25%) were in mild level, 10(50%) were in moderate level, 5(25%) were in severe level.

Table – 3: Shows that the Comparison of nursing intervention on cardiopulmonary parameter of pre and post test in experimental and control group. The findings reveals that the paired test “t” value of cardiopulmonary parameter among children in experimental group is ‘t’= 19.3 and the p<0.0001, Hence it is highly significant. The paired test “t” value of cardio pulmonary parameter among children in control group is ‘t’=15.21 and the p<0.05, Hence it is significant

**RESULTS**

In experimental group pre test 0% were in mild level, 15(75%) were in moderate level , 5(25%) severe level , In post test 14(70%) were in mild level , 6(30%) were in moderate level , nil in severe level ; In control group pre test nil were in mild level, 12(60%) were in moderate level, 8(40%) were in severe level ; post test 5(25%) were in mild level, 10(50%) were in moderate level, 5(25%) were in severe level.

**DISCUSSION**

There is increasing evidence to support the view that nursing intervention on pneumonia children.

The result of the study was to assess the effectiveness of nursing intervention on cardiopulmonary parameter among pneumonia children (4-12yrs) ,In experimental group pre test 0% were in mild level, 15(75%) were in moderate level , 5(25%) severe level , In post test 14(70%) were in mild level, 6(30%) were in moderate level , nil in severe level; In control group pre test nil were in mild level, 12(60%) were in moderate level, 8(40%) were in severe level ; post test 5(25%) were in mild level, 10(50%) were in moderate level, 5(25%) were in severe level.The findings reveals that the paired test “t” value of cardiopulmonary parameter among children in experimental group is‘t’= 19.3 and the  $p < 0.0001$ , Hence it is highly significant. The paired test “t” value of cardio pulmonary parameter among children in control group is‘t’=15.21 and the  $p < 0.05$ , Hence it is significant.

### Conclusion

The study reveals that associationnursing intervention on cardiopulmonary parameter among children(4-12yrs) with pneumonia at puducherry to with demographic data. It was statistically significance with the birth order of the children.

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