

# Frequency of Bronchopneumonia in Patients admitted at D.H.Q Teaching Hospital Sargodha

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## ABSTRACT

**Aim:** To investigate frequency of bronchopneumonia in patients admitted in D.H.Q Hospital Sargodha.

**Study design:** Cross-Sectional Study.

**Place and duration of study:** This study was conducted in the Department of Paediatrics, DHQ Teaching Hospital Sargodha from 1<sup>st</sup> Nov, 2017 to 31 January, 2018.

**Methods:** After taking informed consents patients were tested in D.H.Q Hospital Sargodha laboratory & radiology departments for complete blood count (CBC) & chest X-ray. Those with the positive results were used to determine the frequency of bronchopneumonia.

**Results:** 240 patients were admitted for complaints of respiratory tract infections in the period of three month (Nov. 2017-Jan 2018) in DHQ Teaching Hospital Sargodha. Mean age was 31months. Number of male patients was 135 (56.25%) and of female patients was 105(43.75%). Total patients who were bronchopneumonia positive were 44(18.33%)

**Conclusion:** Frequency of bronchopneumonia is higher among the patients presenting for respiratory tract infections in DHQ teaching hospital Sargodha as compared to the average frequency in Pakistan as well as globally.

**Keywords:** Respiratory tract, infection, Bronchopneumonia, frequency

## INTRODUCTION

Bronchopneumonia is scattered information of the lungs around the bronchioles. It is a common problem in children. It can be viral or bacterial. It may be difficult to differentiate viral from bacterial pneumonia, especially as bacterial cultures are often negative. Recently, it has been illustrated that streptococcus pneumonia, Haemophilus influenza and respiratory syncytial virus are main causative agents of bronchopneumonia in childhood<sup>1</sup>.

WHO evaluates that Acute respiratory infections cause 3 million deaths per year in children below 5 years of age worldwide.<sup>2,3,4</sup> Childhood pneumonia & clinically severe diseases result from an intricate relation of host & environmental risk factors.<sup>5</sup> Predisposing factors for bronchopneumonia include poor nutrition, premature birth, congenital heart defects, overcrowding, dirt/indoor environment & lack of breast feeding<sup>6,7,8,9</sup>.

## MATERIAL METHODS

This study is a cross-sectional study that was done at DHQ Teaching Hospital Sargodha. It is a tertiary care hospital with a well-established Paediatrics Department. It contains well-equipped & state of art intensive care unit & nursery & ward. About 7000-9000 patients are admitted each year. Bronchopneumonia is one of the common cause of admission here in this department. In this study only the patients that were admitted for complaints of bronchopneumonia during this duration of three months were included. All of the data was collected after informed consents & all the data was writing down in the indoor unit register of all consultants. All the patients were admitted after proper history taking & all investigation were done under proper supervision.

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## RESULTS

Total of 240 patients were included in this study during defined duration of 3 months. Out of these 135 patients were male (56.25%) and 105 patients were female (43.75%). Results show frequency of bronchopneumonia among male is more than female patients. (p=.046)

Table 1: Gender Distribution of bronchopneumonia. (n=240)

Gender	Bronchopneumonia		Total
	No	Yes	
Male	32(23.7%)	103(76.3%)	135(56.3%)
Female	12(11.4%)	93(88.7%)	105(43.5%)

X<sup>2</sup> 4.167 P value=0.046

## DISCUSSION

This study gives the frequency of bronchopneumonia in childhood. Result shows that the frequency of bronchopneumonia is higher in Pakistan in comparison with other countries of the world. There are many factors that take part in raising this frequency. For example, delay in vaccination can enhance the chances of bronchopneumonia because of low defending immunity<sup>10,11</sup>. Lack of breast feeding also contributes the risks of bronchopneumonia. Exclusive breast feeding for 6 month is recommended to reduce the frequency of bronchopneumonia and mortality in developing countries<sup>12</sup>.

In 2013, a lancet report was given. According to this report, greater occurrence of pneumonia in children younger than 2 years of age and study from Pakistan showed that pneumonia tend to occur more frequently in younger children<sup>13,21</sup>. One factor that was also observed that more male patients seek medical attention. This can also be the reason of higher frequency. To reduce this increasing health issue, we have to reduce risk factor by

counseling of mother and promote it by television shows social campaigns.

## CONCLUSION

In Pakistan, it is hardly enough to fulfill the needs of growing population. This increasing rate of infection of pneumonia further create a threat to system failure to reduce these health crises efficient measures have to be adopted including education of mother, proper vaccination and improving general hygiene of environment.

**Conflict of interests:** The study has no conflict of interest to declare by any author.

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