

# Use of Blowing Whistles in Improving Respiratory Parameters among children with Lower Respiratory Tract Infection

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**ABSTRACT:** : Infection in the respiratory tract still remains the leading cause of death among all the infectious diseases; worldwide the children are more responsible for 3.9 million deaths. They frequently get hospitalized, and results in school absenteeism. They feel anxious and uncomfortable which affects the Quality of Life. Many breathing exercises help reduce the severity of respiratory symptoms and signs. The current study is based on the scientific evidence obtained from the research of blowing whistles to improve the respiratory outcome.

**Key Words:** Hydroelectricity development, rising economies, renewable energy sources

## INTRODUCTION:

Infection in lower region respiratory tract occur commonly in children and is a major cause of mortality and morbidity.<sup>1</sup>In India, respiratory problem was a major serious menace accounting for 14.3 per cent deaths during infancy period and 15.9 percentages of deaths among children with the age group between 1-10 years.<sup>2</sup>

Lower tract infection may be diagnosed in children of all ages; they tend to occur most frequently in young children who have not yet developed resistance to infectious disease.<sup>3</sup>

World Health Organization says that respiratory illnesses in lower tract, as the second major important cause of death in children in the age group below five years in 2014.<sup>4</sup>

The morbidity and mortality due to respiratory illness is mainly because of lower tract infections.<sup>1</sup>Recurrent Lower respiratory tract infection can be regarded as >3 annual episodes of documented Bronchitis, Bronchiolitis and Pneumonia.<sup>5</sup> These conditions remain the mainstay of hospital admissions and the most common cause of school absenteeism.<sup>6</sup>Every year 450 million cases of pneumonia and causes 3.9 million deaths.<sup>1</sup>

A child is a unique individual. The childhood period is vital because children are vulnerable to diseases, and prone to disability and death. Children with Lower respiratory tract infection may feel uncomfortable.<sup>2</sup>They are unable to carry out their normal activities, and this affects their quality of life. They required frequent hospitalization, due to the infection which affects their family life of the children and also their school attendance.<sup>6</sup>

## BENEFITS OF BREATHING EXERCISES FOR CHILDREN:

Breathing exercises when regularly practiced by the children:

- Helps to strengthen the lungs and control the breathing pattern.
- Increases the lung capacity
- Exercises muscles of the diaphragm in addition to the lungs themselves
- It alleviates the respiratory signs and symptoms
- Muscles of the lips get strengthened
- Reduces the anxiety
- Keeps the mind calm
- Improves the concentration and attention
- Controls the impulses

Many breathing exercises such as blowing balloons, pin wheel blowing, etc. are there for children. Various studies have revealed that the Balloon blowing is a fun and easy way to teach the child how to breathe deeply and has improved the respiratory outcome.<sup>7</sup> Here the researcher attempted to improve the

respiratory parameters (respiratory rate, breath sounds, use of accessory muscles, oxygen saturation and cough) of children with lower respiratory tract infection by blowing whistles.

#### THE PROCEDURE OF BLOWING TARTY WHISTLE:



Children should be made to relax and sit comfortably with their back straight before blowing of the whistle. A deep inhalation through the nose for 5 seconds, to be taken as their bellies swell up and then the exhalation should be blown as strongly as possible into the whistle for a period of 7-8 seconds to produce the most high pitched sound. This should be repeated for 5 deep breaths. It can be done 2-3 times a day. The regular practice of blowing whistle which is less expensive can be done even at the home setup and parents can also be provided information regarding the whistle. This helps to strengthen the respiratory muscles. This can play a significant role to make the airway clear and cause full expansion of parenchyma by improving the efficiency of the respiratory muscles.

#### CONCLUSION:

There are many exercises for breathing especially for children. Blowing whistles is a very easy method, and less costly that is affordable to all. Hence this can be made as their daily routine.

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