

Title: Effect of Yoga Breathing Exercise on the Pulmonary Function Parameter (Peak Expiratory Flow Rate) and Symptom control of children with moderate Persistent Bronchial asthma attending asthma clinic of tertiary care hospital, India -A quasi Experimental study

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Introduction: Bronchial asthma has a significant impact on children, their families, and the health care system resulting in reduced quality of life and increased health care costs. There has been an increase in the prevalence of childhood asthma from all over the world and similar trend is observed in India. In India 15-20 million patients are there, out of which 10-15% are children (WHO, 2004). Childhood asthma is a chronic health condition that affects more than 1 million school-aged children and their families. Nonpharmacological therapy includes yoga breathing techniques such as alternative nostril breathing technique, a form of pranayama (*Pranayama* - the basic vitality necessary to life is termed as *prana* and regulation of *prana* is *pranayama*) reduces the stress and improves better asthma control in children with bronchial asthma. **Objectives**: The study was undertaken with the objective of assessing the effect of breathing exercise (Alternate Nostril Breathing Exercise with deep breathing and controlled relaxation, "pranayama" a form of yoga breathing technique) on the pulmonary function parameter as well as symptom control of children with moderate persistent bronchial asthma. **Methods**: Quasi-Experimental, two group pretest- post-test design were adopted. 60 children attending asthma clinic of tertiary care hospital were selected for the study. Simple random sampling by lottery method was used for selection of the sample. Structured interview was the technique used by the investigator for the collection of the data and the tools used were

structured interview schedule, &Asthma Control Score checklist **(**ACS checklist) and the instrument used was Peak Flow Meter. **Results**: Breathing exercise significantly changed the Peak Expiratory Flow Rate as evidenced by the significant change in the mean percentage of PEFR value from the predicted value in the experimental group. Comparison of mean percentage PEFR value from age wise predicted value in the experimental group showed that **69.5%/ 82.4% , t= 8.275, p= o.ooo(p< 0.05)** and in the control group was **66.0%/ 66.2% , t= 1.326 , p = 0.195 (p> 0.05).** Breathing exercise significantly controlled the symptoms in the experimental group. There was statistically significant change in asthma control parameters in the experimental group after breathing exercise. No such change was noted in the control group. Breathing exercise significantly improved the level of symptom control in the experimental group. No such significant improvement in symptom control was noted in the control group. (McNamer 0.000/ 0.063) , (p< 0.05).Conclusion: Based on the above findings ,the present study concluded that breathing exercise, pranayama has an effect on improving the pulmonary functions and symptom control of children with bronchial asthma.

Biography

Ms.Nisha Laila has completed her BSN and MSN in pediatric Nursing. She secured her research degree, M.Phil (Master of Philosophy) from Manipal University, India in the year 2018 .She had more than 10 years of experience in academic and clinical areas especially in the field of general pediatrics, Pediatric cardiology and pediatric and Neonatal cardiac surgery and cardiac transplant areas. Ms. Nisha is Currently working as Nursing Officer, Heart Failure &Heart Transplant unit, Department of pediatric cardiology at All India Institute of Medical Sciences, New Delhi, India. Published research papers as part of student projects.

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