



BIOPSYCHOSOCIAL DIMENSIONS OF HEALTH OF ASTHMATIC CHILDREN-A DESCRIPTIVE SURVEY.

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ABSTRACT

Asthma is one of the most important chronic diseases of childhood, causing substantial morbidity. Children with chronic diseases have a relatively compromised health and quality of life. The present study was aimed to assess the biopsychosocial dimensions of health of asthmatic children. Descriptive survey design was selected. Asthmatic children and their mothers constituted the sample. The study was conducted among 100 asthmatic children and their mothers, attending the asthma clinic of a selected hospital in Kottayam district. Nonprobability purposive sampling technique was used. Data were collected using a rating scale prepared by the investigator and analysed using differential statistics. Results showed that only 62% of children had good health in biopsychosocial dimensions. Majority of the asthmatic children studied had good physical (69%) and social health (85%) whereas only 34% had good psychological health. There was a significant association between biopsychosocial dimensions of health and selected variables like age of the child and symptom control at 0.05 and .01 level respectively. Study concluded that measures need to be initiated to improve the biopsychosocial dimensions of health of asthmatic children.

KEYWORDS : Biopsychosocial dimensions of health, asthmatic children.

Introduction

Asthma is a chronic lung disease with airway obstruction, airway inflammation and airway hyper-reactivity to various stimuli, often reversible with drugs. It is a major health concern that causes a great burden on the family and society.

Asthma is one of the most important chronic diseases of childhood, causing substantial morbidity. It accounts for a large number of lost school days and interfere with academic achievement and social interaction of the child. Children whose asthma symptoms are not well-managed are likely to experience an impaired level of QOL. (Everhart and Fiese, 2009).

Children with chronic diseases have a relatively compromised quality of life and children with asthma have a more compromised quality of life in the physical domain. (Gandhi et al, 2013).

From some of the important community survey reports, the median prevalence of childhood bronchial asthma in India was determined to be 3.3% (with IQR = 2.3-13.8%). Recent report shows wide variation (4–19%) in the prevalence of asthma in school-going children from different geographic areas in India. The prevalence of current wheeze increased by 1.8-fold to 5.4% (6.2% amongst 6-7yr olds and 4.6% amongst 13-14yr olds).

Children with asthma had a significantly poorer HRQL than other children in the community. In Kerala, there was overall prevalence of 5.2% to 6.1% of current wheezers and 10.2% to 13.8% of ever wheezed patients.

Statement of the problem

A study to assess the biopsychosocial dimensions of health of asthmatic children attending the asthma clinic of a selected hospital in Kottayam district.

Objectives

1. To assess the biopsychosocial dimensions of health of asthmatic children.
2. To find out association between biopsychosocial dimensions of health of asthmatic children and selected sociopersonal and clinical variables.

Methodology

A descriptive survey design was used to assess the biopsychosocial

dimensions of health of asthmatic children.

Hundred asthmatic children and their mothers attending the asthma clinic of a selected hospital in Kottayam were chosen for the study. Children belonging to an age group of 7-12 years and who have been diagnosed to have asthma for more than one year were included. Non probability purposive sampling technique was used. Formal informed consent was obtained from the mothers. Scientific and ethical clearance were obtained from the institution. Mothers rated their child's health using the rating scale prepared by the investigator. Data collected were analysed using descriptive statistics.

Table 1 Frequency distribution and percentage of asthmatic children based on levels of biopsychosocial health.

n = 100

Biopsychosocial health	f	%
Poor (26-51)	1	1
Satisfactory (52-77)	37	37
Good (78-104)	62	62

Table 1 shows that only 62% of the asthmatic children have a good biopsychosocial health and 1% had poor health.

Table 2 Frequency distribution and percentage of asthmatic children based on levels in the biological, psychological and social dimensions of health.

n = 100

Dimensions of health	f	%
Biological		
Poor (12-23)	3	3
Satisfactory (24-35)	28	28
Good (36-48)	69	69
Psychological		
Poor (8-15)	15	15
Satisfactory (16-23)	51	51
Good (24-32)	34	34
Social		
Poor (6-11)	0	0
Satisfactory (12-17)	15	15
Good (18-24)	85	85

The findings show that majority of the asthmatic children have good biological (69%) and social (85%) health whereas only 34% have good psychological health.

Table 3 Chi square value of biopsychosocial dimensions of health of asthmatic children based on age, gender, place of residence, mother's education, occupation, family income ,duration of illness and symptom control.

Sample characteristics	df	χ^2	p
Age	4	10.640	.03*
Gender	2	1.403	.50
Residence	2	2.118	.34
Mother's education	6	6.992	.32
Mother's occupation	8	5.720	.68
Family income	6	4.612	.59
Duration of illness	4	2.293	.68
Symptom control	4	14.788	.01**

Table 3 shows that there is significant association between biopsychosocial dimensions of health and age of child and symptom control.

Discussion

The findings of the study show that only 62% of the asthmatic children studied have good health in biopsychosocial dimensions. Al Khateeb and Al Khateeb (2015) in a literature review found that quality of life in children and adolescents was adversely affected by asthma. Asthma was a cause for school absenteeism and poor academic achievement. They also had emotional and behavioural difficulties. Asthmatic children have a lower score in quality of life when compared to a control group. (Elshazly et al, 2015). In another study 69% of the participants showed impairment in quality of life, with greater difference in the domain of symptoms (Perosa et al, 2013). Activities, symptoms and emotions were the domains assessed.

The present study also found an association between biopsychosocial dimensions of health and age of the child and symptom control. Miadich et al (2015) in a study found that children who were older showed a greater decrease in QOL as their asthma severity increased.

Health is a composite of several dimensions like physical, psychological, social, spiritual, emotional etc. Asthma in children bring alterations in these dimensions even with a successful treatment regime. Management of a child with asthma should not only include medical intervention but also psychological support and counselling (Nair S, 2014). Health professionals need to address this concern in order to provide optimum health to the child. Measures need to be initiated to improve the comprehensive health of an asthmatic child.

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