



Institute of Postgraduate Childhood Studies  
Medical Studies Department for children

## **Study of Effect of Health Education Program on Adherence among Children with Persistent Asthma**

A thesis submitted for Fulfillment of the Ph. D. Degree in Childhood Studies  
(Child Health and Nutrition)

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معهد الدراسات العليا للطفولة  
قسم الدراسات الطبية للأطفال

## دراسة دور برنامج تعليم الأطفال المصابين بحساسية الصدر

### طرق الإلتزام بالعلاج وأثره في تحسن صحة المريض

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## **Abstract**

**BACKGROUND:** The goal of health education program offered to asthmatic children and their parents resulted in marked improvement in pulmonary function tests (FVC and FEV1) of asthmatic children and outcome of the disease (no. of cases =43, no. of control =42).

**OBJECTIVE:** The aim of this study was to evaluate the effectiveness of health education program on adherence among children with persistent asthma aiming to improve the pulmonary function tests.

**SUBJECTS AND METHODS:** The present study (intervention study) evaluated 85 asthmatic children, known and treated for bronchial asthma, and collected general data, medical history, questionnaire assessment, pulmonary function tests using Spirometry and health education program.

**RESULTS:** The results showed high statistical significant difference in pulmonary function tests (FVC and FEV1) of asthmatic children between pre and post health education program and follow up. As regard FVC the total mean of  $(89.84 \pm 11.97)$  after program compared to  $(72.84 \pm 16.02)$  before program ( $t= 12.80$ ,  $p\text{-value} <0.001$ ) as regard



FEV1 the total mean of  $(107.54 \pm 6.55)$  after program compared to  $(98.74 \pm 15.57)$  before program where  $(t=3.62, p<0.001)$ .

**CONCLUSIONS:** Health education to asthmatic children was an essential component of successful asthma management through improvement of pulmonary function tests.

**Keywords:**

Health Education Program – adherence – pediatric asthma



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### List of Errata

Page	Line	Word	Correction
v		PFTs	-
33	8	allergins	allergens
83	6	(Table 3)	(Table 4)
98	13	guidelines 23, 31, 32	guidelines
106	21	(table 8)	(table 9)
111	12	b2	β2
133	7	the ophylline	theophylline
183	4	marked improvement	no difference
185	4	marked improvement	no difference
203	5	(table 13)	(table 12)
203	18	(table 16)	(table 15)
206	6	(table 14)	(table 13)
206	7	(table 15)	(table 14)
207	10	(table (19 and 20)	(table 18 and 19)
217	18	Clark s	Clark's
218	5	(7 questions)	(8 questions)
218	13	(table 17)	(table 16)
218	17	(table 18)	(table 17)
219	6	(table 19)	(table 18)
219	14	(table 20)	(table 19)
219	19	(table 21)	(table 21)
220	2	(table 25)	(table 24)
220	6	(table 26)	(table 25)
220	10	(table 27)	(table 26)
227	20	255, 000	255,000
229	1	Clarks	Clark's
1	الملخص العربي	فعالية	فاعلية





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### **List of Abbreviations**

<b>ACT</b>	Asthma Control Test
<b>ADCs</b>	Airway dendritic cells
<b>AHR</b>	Airway hyper-reactivity
<b>AIA</b>	Aspirin-Induced Asthma
<b>AIT</b>	Allergen immunotherapy
<b>APR</b>	Acute phase response
<b>ASM</b>	airway smooth muscle
<b>BAL</b>	Broncho Alveolar Lavage
<b>BHR</b>	bronchial hyper-responsiveness
<b>BMI</b>	Body Mass Index
<b>BTS</b>	British thoracic society
<b>CAMP</b>	Childhood Asthma Management Program
<b>CO</b>	carbon monoxide
<b>COPD</b>	Chronic obstructive pulmonary disease
<b>DALYs</b>	disability-adjusted life years
<b>DC</b>	dendritic cell.
<b>DEP</b>	Diesel exhaust particles
<b>EAR</b>	Early allergic response
<b>ECG</b>	Electrocardiography
<b>EIA</b>	Exercise-induced asthma
<b>EIB</b>	exercise-induced broncho-constriction