

# بسم الله الرحمن الرحيم



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شبكة المعلومات الجامعية التوثيق الالكتروني والميكرونيلم





## جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

## قسم

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### INTEGRATED APPROACH FOR PREVENTION OF ASTHMA AMONG SCHOOL CHILDREN

#### **THESIS**

Submitted in partial fulfillment of the **M.D. Degree** in Public Health

By

Salwa Abd-Elmageed Atlam M.B.B.Ch., MSc., Public Health Tanta University

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TANTA UNIVERSITY
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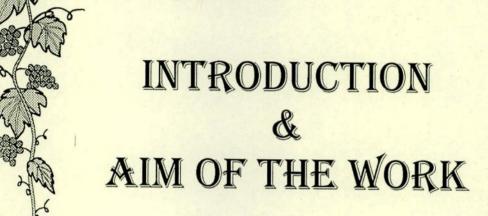
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#### INTRODUCTION AND AIM OF THE WORK

Asthma is the most common chronic childhood illness all over the world. (1) It has been proved that its prevalence and severity are increasing. (2) Asthma is a particular problem for schools and public health officials, not only as it causes asthmatic children to miss school, but also asthma exacerbations could be very disruptive to the entire classrooms. (3) So, health care providers, public health strategists and school personnel have to be aware with the role of school in prevention and control of asthma attacks as well as ongoing management of childhood asthma. (4)

High asthma prevalence is not the only motive for an integrated approach for asthma prevention and control. The following are also motives for such approach. (5, 6): -

- Asthma prevalence is increasing rapidly in children particularly where urbanization is taking place. This might be attributed to factors including housing with reduced ventilation, exposure to indoor allergens, tobacco smoke, viral infections and chemical irritants. (7)
- Asthma is a chronic ongoing inflammatory disease with an airway obstruction in which both genetic predisposition and environmental factors act hand in hand. (8,9) Attacks come and go and could be mild, moderate or sever. Sometimes, it is fatal. It may leave sequelae as stunted growth irreversible lung changes and side effects due to prolonged drug use.. (10)
- It has been proved that environmental control and early prevention of exposure of susceptible individuals to potent allergens can prevent asthma attacks. (11) The availability of newly developed anti-asthma-therapy as a long-term management makes prevention and control of asthma episodes feasible. (12)

- Being a chronic disease, it requires continuous medical care. Patients should receive daily long-term medications to control the underlying inflammation and prevent symptoms and attacks. If symptoms occur, short-term medications must be used as relievers. .<sup>(13)</sup> To maintain control of asthma, a management plan should be developed to specify triggers to avoid, and medications to follow. <sup>(14)</sup>
- Bronchial asthma is not a disease in which drugs alone could control or prevent attacks. It is important to avoid stimuli that irritate and inflame the airways and make asthma worse. These are called asthma triggers each patient must learn what triggers he or she should avoid. (15) For proper prevention and control of asthma attacks, patients are in need for building up a state of partnership with physicians, nurses, educators and public health officials. (16)

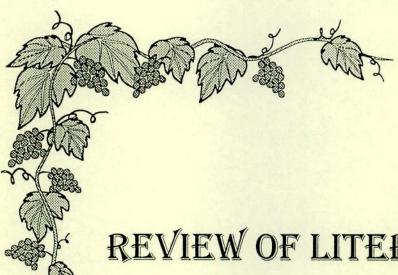
According to Khedr (1988), the school age is more liable to asthma exacerbation. He attributed this to overcrowding-induced repeated viral infections, as well as physical exercises. He added also that asthma in school children is characterized by: -

- \* It may occur during the school day and not noticed by parents.
- \* The asthmatic child may not be able to share in physical education in school due to exercise inducing asthma.
- \*The asthmatic school children might not properly use the prescribed medication especially inhalers.
- \* School children may be exposed passively to tobacco smoke. (17)

Fortunately; the World Health Organization (WHO) Study Group on the global strategy for asthma prevention and control, has issued practical guide to help physicians, nurses, public health officials, program managers and health workers to deal with different asthma-related problems at different levels of

severity. (18) An Egyptian expert panel has adapted the asthma guidelines to the Egyptian environment, habits, traditions and types of living in the different socioeconomic classes. The approach for prevention and control of asthma comprises a set of interventions that should be integrated to minimize frequency and severity of asthma (19). A matter necessitating a well-organized efforts paid by physicians, nurses, public health officials and teachers to work as a team. (19) This was the motivating force behind the initiation of this study with the aim of:

- (1) Determination of the epidemiological profile of asthma among school children.
- (2) Finding out the impact of asthma on quality of life.
- (3) Planning for integrated approach for asthma management among school children in Tanta.



REVIEW OF LITERATURE



#### REVIEW OF LITRATURE

#### **Definitions**

Owing to the clinical observation that "asthma represents a diffuse airways obstruction, which is reversible either spontaneously or with treatment", many attempts to formulate a universal definition have been eluded till a recent definition based on clinicopathological findings. (20, 21) In a historical order, the following are the most common attempts; In 1959, a definition of asthma described it as a syndrome that is characterized by increasing responsiveness of the bronchi and the trachea to various stimuli, manifested by wide spread narrowing of airways that changed either spontaneously or as a result of therapy. (22)

Meneely et al., (1962) defined asthma as a disease of the respiratory passages characterized by dyspnea of an obstructive type that was predominantly expiratory reversible at least partially and of varying severity and duration. (23) Porter and Birch (1971) mentioned that there was no single definition that was universally accepted, due to an obscure etiology or etiologies, a diverse clinical picture and multiple pathologic mechanisms. (24)

Scodding (1977) defined asthma as a disease characterized by wide variations in resistance to intrapulmonary airway flow over short periods of time. (25)

Tuft and Muller (1978) defined bronchial asthma as a recurrent, periodic or paroxysmal type of breathlessness or dyspnea characterized by whistling type of respiration that was associated with prolongation of the expiratory phase. In young children the prolonged expiratory effort may be replaced by noising dyspnea. (26)