

Assessment of Mother's Knowledge Concerning Recurrent Wheezy Chest among Children under Age five years old at AL-Hilla Hospitals/Iraq

¹Raghad Nadhem, ²Nuhad Mohammed and ³Adnan Hundhal

¹Master student Child Health Nursing , Faculty of Nursing, University of Babylon

²PhD Child Health nursing , Faculty of Nursing, University of Babylon

³F.I.C.M.S. Ped, College of Medicine, University of Babylon

Abstract:

A descriptive study was carried out on mothers with recurrent wheezy chest children under age five years old. A Quantitative research, descriptive design cross sectional study consisting of (250) mothers have children with recurrent wheezy chest were selected throughout the use of non-probability sampling approach, that include children who were diagnosed with recurrent wheezy chest admission to emergency and wards in Babylon teaching hospital for maternity and Children and AL-Noor hospital for children. The result show that mothers knowledge have poor level (47.6.0%), As well as self-Efficacy and perceived control the result found poor level (51.2%) and the final result total scores of all the items (55.2%) with poor level. Educational training programs about asthma should be conducted at hospitals for mothers, to understand and know how to deal with asthma as a chronic disease in order to overcome challenges of asthma control. Simple educational pamphlets and posters about asthma should be provided for all mothers in outpatient clinics. Similar studies should be conducted on a larger sample of children with different age and wide regions.

Keywords: knowledge, Wheezy, Children under five years old.

INTRODUCTION

Asthma is one of the common chronic diseases in children; it illustrate by recurrence spasms of breathlessness and wheezing. The prevalence of asthma has increased consider in the last few years in many countries. Estimates of the W.H.O that (235 million) people currently suffering from asthma, hence, placing a huge burden on health resources in many countries (1)

Wheezing is the high pitched whistling sound the course of breath and it happens when the air transfers over narrowed breathing pipes in the lungs , wheezing is a sign that is child may be having breathing problems, the sound of wheezing is most apparent whilst breathing out (exhaling), it can also be heard while (inhaling) (2).

Most cases of persistent wheezing and asthma begin in early life of childhood and these can determine respiratory health during life. Wheezing is common among preschool children, it can consequence from several diverse conditions, and it is hard to predict whether or not a wheezy infant will develop asthma.(3) .

Asthma has turn out to be most common in the children and grown person all over the place the words in least spans, It is expected that around, may be an extra (100)million personnel with asthma by 2025. Asthma accounts for about 1 in every (250)deaths globally, many of the deaths are inevitable. The suggest prevalence of asthma in Middle East is about(5.8 %), usually inside low commonplace regions. gap is remained among available clinical realities and scientific cure besides its utilization for the advantage of asthmatic inhabitants inside the middle East. (4).

Childhood asthma is common disease and continue to be the leading severe chronic disease among children in different countries, In Iraq, the prevalence of childhood asthma is(16.4%) in primary school children and (15.8%)in children aged less than 5 years (5).

Asthma is the furthestmost widespread chronic disease among children; its commonness and ill health have been expanding in least spans. Childhood asthma incidences fluctuated from (2.1%) in advance to (32.2%) in settled countries. Pediatric asthma occurrence inside Egypt reached between (7.7% in Nile Delta 3 to 9.4% in Cairo) (6).

Nevertheless the common signs and symptoms of asthma involve wheezing, shortness of breathing, rapid pulse, cough, anxiety and abnormal breathing pattern or cessation of breathing for any

period time (7). Symptoms some or all of the following could be present in patients with asthma: wheezing (a whistling noise while breathing), chest tightness, cough and breathing difficulties. These symptoms are most common during the night and early morning. Wheezing is a sound heard when air tries to exit from narrowed tubes. Symptoms varies from individual to individual but worsen during an asthma attack, which is usually caused by an infection , exposure to allergens or other factors limiting lungs ability to expel air (8).

Pathophysiology of Asthma:

Specified the three wheezy phenotypes which have been identified in children with asthma transition early wheezing (common infancy) , non-atopic wheezing in the preschool child and IgE-mediated wheezing (atopic asthma)(9).As (10) stated that the etiology of Recurrent Wheezing and Asthma: environmental exposure , genetic predisposition and viral infection.

Several roles the nurses can be performed regarding asthma disease including get a thorough history of allergic reactions to certain many aggravating factors, so the nurse role identified by(11) is to assess the state of the child's respiratory system by monitoring the severity of the symptoms, and evaluation medications as prescribed and monitor patient responses to those medications.as well as liquid management therapy if the child with dehydration. Role of the nurses included Effective patient education involves a partnership between the patient and health care professional, which demands frequent reinforcement and relies on discovering the individual "health's beliefs and attitudes towards his or her asthma. This will determine how they cope with the disease and also compliance with medication. (12).

Mothers role recurrent wheezy control with a great importance to decrease danger (Avoid exacerbations, reduce need for emergency care, hospitalization, reduce adverse properties of treatment (13). It is a crucial in combining approaches to deal comprehensively with allergens and pollutants encountered in the home environment and recommend the home environment for asthmatic patients should be clean, free of animals, dust free, dry and smoke-free as possible. Pollen may occur only at certain times of the year. Patients with asthma who have identified adverse effects of pollen from specific agricultural crops should be advised to avoid unnecessary exposure to these crops .The most common crops that seem relevant in this category include corn grass .Air

pollution should be advised to aggravate asthmatic patients to avoid being in places that are obviously contaminated. It is also helpful to advise asthma patients to avoid environments that are excessive dirt, or engage in exercise in extreme cold environments (14). Reduced symptoms (e.g., cough, wheezing, difficulty breathing in the day and night), reduced use of short-acting s-agonists for relieving symptoms ,reduced exercise induced

symptoms and limitations, Reduced exacerbations, emergency visits, systemic steroids, admissions, patient/parents asthma control, inhaler technique and written asthma action plan monitoring adverse effects of medications monitoring growth (height and weight) (15).

This study aim to identify the mothers knowledge about recurrent wheezy chest among children under age five years old.

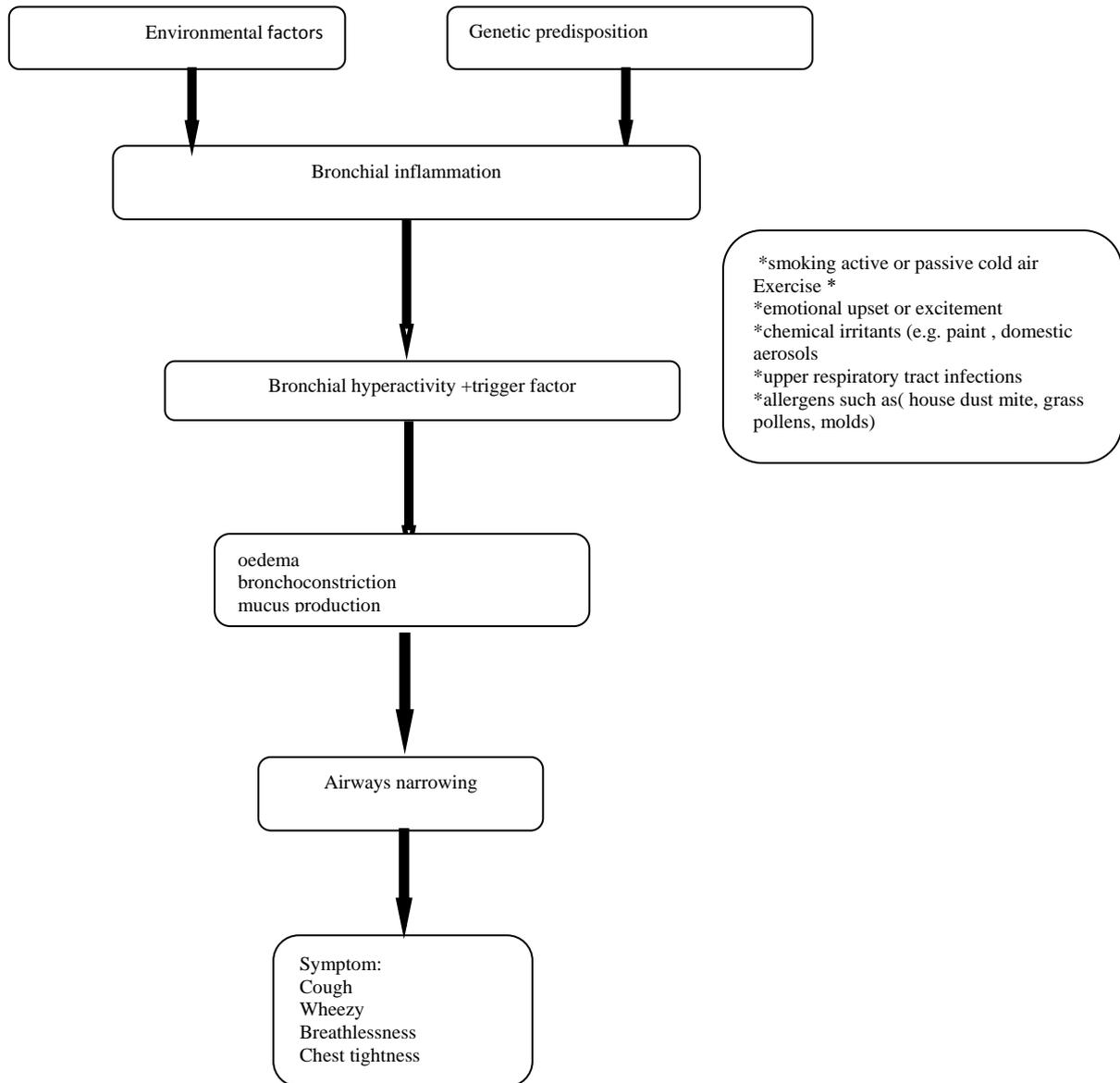


Figure (1) Pathophysiology of asthma.(9).

MATERIALS AND METHODS

A cross sectional descriptive study carried out between the period of (29 November 2016 to October 2017.) in Children Hospitals at Hilla included (Babylon Teaching Hospital for Maternity and Children and AL-Noor children Hospital) in Iraq after obtain legal permission from hospital and ethical approval from sample of study to participate in research, the sample of study consist from 250 mothers children with recurrent wheezy chest under age five years old selected throughout the use of non-probability sampling approach, that include patients who are identified with recurrent wheezy chest admission emergency and wards in Babylon teaching hospital for maternity and children and AL-

Noor children hospital .The questionnaire used in this study are taken after review of previous literature and modified by researcher, its consist from six parts, one part consists of mothers demographical data include eight items, the second part consists of child demographical data nine items, the third part is include clinical information's include nine items, the four part is consist medication information included three items, the part five include knowledge domain of mother twenty two items and six part include Self –Efficacy and perceived control eight items, each mother need to approximately (35-40) minutes for answer on the items of questionnaire.

RESULTS

Table 1 show the distribution of the socio-demographic and employment data of the sample , related to the majority of the mothers are at age group (20-25) years old (49.2%), while (65.6%) of the mothers were not Educated .Mother Occupation revealed that (90.4%) unemployed. Concerning monthly income, results indicated were (42.8%) which considered not enough and (62.0%) live in urban. Most of the mothers included in the study (96.8 %) were not smoking while (33.2%) of the fathers were smoking and the gestation at birth including (87.6 %) most mothers 9 months.

Table (1) Distribution of the socio-demographic and employment data of the sample (n= 250). n= Sample

Mother age	Frequency	Percent
20-25	123	49.2
26-30	54	21.6
31-35	70	28.0
36-40	3	1.2
Total	250	100.0
Level of education	Frequency	Percent
Not Educated	164	65.6
Educated	54	21.6
Well Educated	32	12.8
Total	250	100.0
Mother Occupation	Frequency	Percent
Employed	16	6.4
Unemployed	226	90.4
Free business	8	3.2
Total	250	100.0
Monthly income	Frequency	Percent
Enough	48	19.2
Not Enough	95	38.0
Not Quite Enough	107	42.8
Total	250	100.0
Residence	Frequency	Percent
Urban	155	62.0
Rural	95	34.8
Total	250	100.0
Mother smoking history	Frequency	Percent
Smoking	8	3.2
Non Smoking	242	96.8
Total	250	100.0
Father smoking history	Frequency	Percent
Smoking	83	33.2
Non Smoking	167	66.8
Total	250	100.0
Gestation of birth	Frequency	Percent
7 months	8	3.2
8 months	23	9.2
9 months	219	87.6
Total	250	100.0

The table (2) clarify illustrates that the mother's knowledge have poor level (47.6%), as well as self –Efficacy and perceived control poor level (51.6%). Whereas, the final result total scores of all the items (55.2%) were with poor level.

Table (2) shows the frequency and percentage of the items regarding mother's knowledge

Knowledge domain of mother	Frequency	Percent
Low knowledge	119	47.6
Moderate Knowledge	40	16.0
High knowledge	91	36.4
Total	250	100.0
Self –Efficacy and perceived control	Frequency	Percent
Low knowledge	129	51.6
Moderate Knowledge	63	25.2
High knowledge	58	23.2
Total	250	100.0
Total scores of all the items	Frequency	Percent
Low knowledge	138	55.2
Moderate Knowledge	14	5.6
High knowledge	98	39.2
Total	250	100.0

RESULTS AND DISCUSSION

The table (1) indicates that (49.2%) of mothers are at age group (20-25) years old. This result come to an agreement with the findings of(16) who found that less than half of their population(46.25%) aged less than 30 years as well as (17) who had a study entitled in effectiveness of structured teaching programmer on knowledge regarding bronchial asthma and its management among mothers of asthmatic children and his result presented that the majority of mothers were between of 21-25 years, while (18) who disagree with the current study when found majority of mothers' age ranged between 25 to 31 years old.

Concerning mother's level of education, the result revealed that mothers are not Educated (65.5%). This result approved with(19) in a study conducted at Tharparkar which showing overall literacy rate of mothers being 74% with urban background, and not agreed with the four findings of (20) they found that (90%) of mothers primary school graduate. (21) and (22) who mentioned in his study that most of parents had attained primary education. The findings also contradicted with (23) who mentioned that most of mothers were highly educated.

According mother's occupation, the present study showed that (90%) of the mothers are Unemployed which approve with study of the (24) who found that wheezy chest were more in children of non-working mothers when it compared to children of working ones.

Regarding family residency, results revealed that the majority of the population (62.0 %) were living in urban, which is compatible with (25) who study the prevalence of bronchial asthma among Egyptian school children, they found that there were no great difference between prevalence of childhood asthma in urban and rural areas that may be explained by similarity in environmental conditions in both areas due to close proximity to each other in the crowded Nile Delta region. On the other hand it was observed by (26)that allergic diseases were more prevalent in urban residents followed by suburban residents with few cases coming from rural areas. They added that, these differences can be partially explained by differences in environment exposures, such as air pollution, and exposure to allergens, such as pollens, cockroaches, and house dust mites

Table (2) shows that (55.2) of mothers knowledge and Self – Efficacy and perceived control who have poor knowledge .This result support by study entitled (Knowledge of mothers concerning child with bronchial asthma. Department of basic science, Faculty of Den Nursing Thi-Qar University, Alnasiryia - Iraq) conducted by (18), While it was opposed with (27) who found that more than half of mothers did not know the definition of asthma. As regards to clinical picture of asthma, results of the current study publicized that the population have poor and unsatisfied level of knowledge concerning to asthma symptoms as cough and shortness of breathing as well as control risk indicators. This result is congruent with a study Entitled (The knowledge, attitudes and practices of parents of children with asthma in 29 cities of China) conducted by(27) The researcher found that parents had poor of knowledge about the signs and symptoms of asthma and the index of attacks . From the researcher point of view that the mothers know the common symptoms of asthma that occurs to their children but did not know other signs and symptoms which threat their children life. In relation to avoidance of attack, the contemporary study revealed that the mothers had incomplete information From the researcher standpoint that the population of the present study expose their children to aggravated issues in spite of their distinguishing the influences of trigger factors which were related to their poor level of knowledge provided by the health team about allergens and irritants which can prevent asthma attack. This result matched with a study directed by (28) who found that children and mothers should knew the avoidance of asthma triggers by irritants control, they could reduce the risk of recurrent asthma attack. While this result distressed with another research conducted by (29) who found that all mothers responded as gave necessary medication regularly in order to prevent asthma attacks.

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