

Mothers Information Regarding Asthmatic Child Care in Kirkuk City

معلومات الامهات حول العناية بالطفل المصاب بالربو في مدينة كركوك

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المستخلص

الهدف: تهدف الدراسة الى تقييم معلومات الامهات حول العناية بالطفل المصاب بالربو في مدينة كركوك . وكذلك لايجاد العلاقة بين معارف الامهات و بعض الخصائص الديموغرافية مثل (عمر الامهات، المستوى التعليمي ، و طريقة تغذية الطفل).

المنهجية: أجريت دراسة وصفية بأنتباع أسلوب تقييم طبق على الامهات في مستشفى الاطفال الاتي لديهن أطفال مصابين بالربو للفترة من بداية شهر تموز 2011 لغاية نهاية آذار 2012، ولتحقيق اهداف الدراسة اختيرت عينة غرضية غير احتمالية مكونة من (50) ام لديها أطفال مصاب بالربو في مستشفى الاطفال. صممت استمارة استنبائية لغرض الدراسة تضمنت جزآن، جزء الاول له علاقة بالصفات الديموغرافية (8) فقرة . والجزء الثاني يتضمن (26) فقرة، مكونة من ثلاثة اقسام، القسم الاول يشمل (7) فقرات، حول عوامل تهيج الربو، القسم الثاني يشمل (6) فقرات، حول اعراض نوبة الربو، القسم الثالث يشمل (13) فقرات حول عناية بالطفل المصاب بالربو. عرضت الاستمارة على (5) خبراء لتحديد مصداقية محتوى الاستمارة . و بطريقة المقابلة الشخصية مع عينة البحث جمعت المعلومات وقد حلت البيانات باستخدام التحليل الإحصائي الوصفي وكذلك التحليل الأستنتاجي.

النتائج: أشارت نتائج الدراسة إلى أن أغلبية الأطفال يتراوح أعمارهم من (1-3) سنوات واغلبية الاطفال من الذكور ونسبة (62%) وكذلك اضرهت ان أغلبية الأطفال يعتمدون على الأكل الطعام. و فيما يتعلق بعمر الأم، وجدت الدراسة ان غالبية الأمهات أعمارهم بين (23-27) سنة، وبخصوص المستوى التعليمي ظهر أن أعلى نسبة من الأمهات من خريجي الابتدائية حيث شكلوا (40%). و كذلك أظهرت نتائج الدراسة بان هناك علاقة إحصائية قوية بين معارف الأمهات و المتغيرات التي استخدمت في الدراسة مثل (عمر الام، المستوى التعليمي، و الطريقة التي يعتمدها الطفل في التغذية).

التوصيات: أوصت الدراسة بتواصل التعليم المستمر و ت زويد الأمهات بمصادر و مبادئ تربية الأمهات اللواتي عندهن الأطفال المصابات بالربو . وبرنامج التدريبي و نظمي

Abstract

Objectives: To assess the information of mothers regarding asthmatic child care, and to find out the relationship between information of mothers and some of demographic characteristic such as age of mothers, Level of education, and away of child feeding.

Methodology: Quantitative design (a descriptive study) was conducted in pediatric hospital in Kirkuk city from the period of first of July 2011 to the end of March 2012. To achieve the objectives of the study, non probability sample of (50) mothers having asthmatic children who attend to the pediatric hospital.

The data are collected through utilization of constructed questionnaire. It consists of two parts: part one include (8) items, about demographic characteristics of mothers and her children and part two include (26) items, which includes (3) sections, section (1) consist of (7) items, about aggravating factors of asthma, section (2) consist of (6) items, about symptom of sever attack of asthma, and section (3) consist of (13) items, about asthmatic child care. To content validity of instrument was established through penal of (5) expert.

Data I collected by interview technique using the questionnaire, data I gathered and analyzed by the application of descriptive and inferential statistics methods.

Results: The study indicated that the majority of children are aged between (1-3) years old, and highest percentage of children are male (62%). Regarding to the child feeding, the majority of children are food feeding and represent (48%). Regarding age of mother the study finding that the highest percentage (38 %) of the mothers their age group between (23-27) years, and concerning mothers' educational level, the majority of them graduated from primary school (40%). The study also approves that there was a statistical significant association between mother's information and some of demographic characteristic such as (Age, and level education of mothers and way of child feeding).

Recommendation: Education program should be provided to the mothers who have children with asthma and course training program should be developed and implemented.

Keyword: Asthma, Knowledge, Mother

Introduction

Children are the most important age group in all societies. Health status and health behavior of later life are laid down at this age. Child health care should include specific biological and psychological needs that must be met to ensure the survival and healthy development of child and future adult ⁽¹⁾. The study shows in 2000 that the 10 - 20 % of children in the United States is affected by a chronic medical condition ⁽²⁾. Asthma is one such chronic illness that has been estimated to affect just over six million children ⁽³⁾. In addition to this number, it is thought that many children with asthma go undiagnosed, raising estimates of the actual number of children with asthma to more than nine million ⁽⁴⁾.

Asthma is most common respiratory condition in infant and children. It appears as early as six months of age, rang from mild to sever, and can be fatal ⁽⁵⁾.

Approximately 34.1 million people in the United States have been diagnosed with asthma in their lifetime. According to the most recent US Centers for Disease Control and Prevention (CDC) Asthma Surveillance Survey, the prevalence of current asthma during 2001-2003 prevalence is estimated at 8.5% in children, and the burden of asthma increased more than 75% from 1980-1999. Asthma accounts for more school absences and more hospitalizations than any other chronic illness ⁽⁶⁾.

Children with asthma develop an early dependence on their parents not only to provide the basic needs in life, but also to seek out and provide proper asthma care ⁽⁷⁾. The rising asthma trends ar/e of major concern to nurses caring for families with children who have asthma. Much of the literature on chronically ill children focuses on family management of diseases, children's self-care activities and the coping of this condition by family members ⁽⁸⁾. Most studies have shown that the failure of patient, Parents, careers and health personnel to recognize the severity of asthma attack, delay in seeking

medical help and the subsequent delay in initiation treatment are major contributing factors. Education of parents of children with asthma is an essential step to reduce this trend in asthma ⁽⁹⁾.

Methodology

A quantitative design, a descriptive study has been carried out in Pediatric hospital in Kirkuk city at the first of June 2011 to the end of March 2012. To assess mothers knowledge regarding asthmatic child care.

Non-probability samples that consisted of (50) mothers having asthmatic child and attend to the pediatric hospital.

Through extensive review of relevant literature a questionnaire was designed and constructed for the purpose of the study by interview technique with the sample. Overall items of the questionnaire were (34) items. (8) Items, about demographic characteristics of mothers and her child, and (26) items, which includes (3) part, part (1) consist of (7) items, about aggravating factors of asthma, part (2) consist of (6) items, about symptom of sever attack of asthma, and part (3) consist of (13) items, about asthmatic child care by the family. The all (13) items were measured by using three level of (likert) scale and rating as, always (3), some time (2), and never (1) (10). Also for other (13) used scale and rating as, I know (3), not sure (2), and don't know (1). To content validity of instrument was established through penal of (5) expert.

Data were analyzed by using descriptive analysis which consists of frequency, percentage, mean of scores, and inferential analysis which consist of Pearson's Chi Square. Mean of score of < 1.66 was considered low significant, (1.67 – 2.32) was considered moderate significant, mean of score of < 1.66 was considered low significant, (1.67 – 2.32) was considered moderate significant, and (2.33 – 3) was considered high significant.

Result**Descriptive Characteristics of Mothers and their Children****Table 1. Distribution of the Mothers and their Children According to their Sociodemographic Characteristics.**

| Age | F | % |
|-------------------------------------|-----------|------------|
| 1 – 3 years | 23 | 46% |
| 4 - 6 years | 12 | 24% |
| 7 - 9 years | 10 | 20% |
| 10 - 12 years | 5 | 10% |
| Total | 50 | 100 |
| Gender of Child | F | % |
| Male | 31 | 62% |
| Female | 29 | 38% |
| Total | 50 | 100 |
| Child Feeding | F | % |
| Breast Feeding | 5 | 10 |
| Artificial Feeding | 6 | 12 |
| Compound Feeding | 15 | 30 |
| Food Feeding | 24 | 48 |
| Total | 50 | 100 |
| Age of Mother | F | % |
| > 18 | 1 | 2% |
| 18 - 22 | 4 | 8% |
| 23 - 27 | 19 | 38% |
| 28 - 32 | 16 | 32% |
| 32 - 37 | 4 | 4% |
| ≤ 38 | 6 | 12% |
| Total | 50 | 100 |
| Level of Education of Mother | F | % |
| Illiterate | 11 | 22% |
| Read and Write | 15 | 30% |
| Primary school graduate | 20 | 40% |
| Secondary school graduate | 2 | 4% |
| Intermediate school graduate | 2 | 4% |
| Medical institute graduate | 0 | 0% |
| College graduate | 0 | 0% |
| Total | 50 | 100 |

Continues

Table 1.

| Family Member Including Parent | F | % |
|---|-----------|-------------|
| Family Consist of Three Member | 6 | 22% |
| Family Consist of Four Member | 7 | 18% |
| Family Consist of Five Member | 12 | 22% |
| Family Consist of Six Member | 9 | 18% |
| Family Consist of Seven Member | 5 | 5% |
| Family Consist of Eight Member | 3 | 3% |
| Family Consist of Nine Member | 2 | 2% |
| Family Consist of Ten Member | 6 | 2% |
| Total | 50 | 100% |
| Number of Children in the Family | F | % |
| Family have one child | 11 | 22% |
| Family have two child | 9 | 18% |
| Family have three child | 11 | 22% |
| Family have four child | 9 | 18% |
| Family have five child | 5 | 5% |
| Family have six child | 3 | 3% |
| Family have seven child | 1 | 2% |
| Family have eight child | 1 | 2% |
| Total | 50 | 100% |
| Arrangement of Child have asthma between Children in Family | F | % |
| First Child | 20 | 40% |
| Second Child | 14 | 28% |
| Third Child | 6 | 12% |
| Fourth Child | 2 | 4% |
| Fifth Child | 3 | 6% |
| Sixth Child | 5 | 10% |
| Total | 50 | 100% |
| Residential Area | F | % |
| Urban | 36 | 72% |
| Sub Urban | 9 | 18% |
| Rural | 5 | 10% |
| Total | 50 | 100% |

F: Frequency

%: Percentage

This table shows distribution of (50) mothers and their children, which indicate (46%) of the children (1-3) years, (62%) of children are male, and (48%) of children are food feeding. Regarding age of mother's child the table shows (38 %) of the mothers their ages between (23-27) years, more of them graduated from primary school (40%), (24%), of family consist of (5) number, most family have (one) child (22%), Also the table shows (40%) of family first child have asthma, and (72%) of family live in urban.

Table 2. Distribution of Mothers' Information Regarding Aggravating Factors of Asthma

| No | Scales level Items related to aggravating factors of asthma | I know | | Not Sure | | I don't know | | Mean of score | Comparative Significant |
|-------|--|--------|------|----------|------|--------------|------|---------------|-------------------------|
| | | F | % | F | % | F | % | M.S | |
| 1.1.1 | Common cold | 44 | 88 % | 4 | 8 % | 2 | 4 % | 2.84 | H |
| 1.1.2 | Weather Change | 45 | 90 % | 4 | 8 % | 1 | 2 % | 2.88 | H |
| 1.1.3 | Insecticides | 35 | 70 % | 11 | 22 % | 4 | 8 % | 2.62 | H |
| 1.1.4 | Dust | 45 | 90 % | 2 | 4 % | 3 | 6 % | 2.84 | H |
| 1.1.5 | Smoke | 46 | 92 % | 2 | 4 % | 2 | 4 % | 2.88 | H |
| 1.1.6 | Allergic of food | 25 | 50 % | 12 | 24 % | 13 | 26 % | 2.24 | M |
| 1.1.7 | Psychological Condition | 32 | 64 % | 12 | 24 % | 11 | 22 % | 2.62 | H |

H= High Information M= Moderate Information L= Low Information M.S= Mean of score F: Frequency %: Percentage

This table has revealed that the mean of scores of them was moderate information on item (6), and highly Information on items (1, 2, 3, 4, 5, and 7).

Table 3. Distribution of Mothers' Information Regarding Symptom of Sever Attack of Asthma

| No | Scales level Items related to sever attack of asthma | I know | | Not Sure | | I don't know | | Mean of score | Comparative Significant |
|-------|---|--------|------|----------|------|--------------|------|---------------|-------------------------|
| | | F | % | F | % | F | % | M.S | |
| 1.2.1 | Sever Shortness of breath | 42 | 84 % | 7 | 14 % | 1 | 2 % | 2.82 | H |
| 1.2.2 | Persistent Sever Cough | 36 | 72 % | 11 | 22 % | 3 | 6 % | 2.66 | H |
| 1.2.3 | Inability to Talk or Walk | 31 | 62 % | 11 | 22 % | 8 | 16 % | 2.46 | H |
| 1.2.4 | Inability to play | 38 | 76 % | 4 | 8 % | 8 | 16 % | 2.60 | H |
| 1.2.5 | Blue Lips and Nails | 21 | 44 % | 7 | 14 % | 22 | 44 % | 1.98 | M |
| 1.2.6 | Inability to lie down or Sleeping | 35 | 70 % | 8 | 16 % | 7 | 14 % | 2.56 | H |

H= High Information M= Moderate Information L= Low Information M.S= Mean of score F: Frequency %: Percentage

This table indicated that the mean of score of them was moderate information about item (5), and highly information on items (1, 2, 3, 4, and 6).

Table 4. Distribution of Mothers' Information Regarding Asthmatic Child Care by the mothers'

| No | Scales level Items related to asthmatic child care | I know | | Not Sure | | I don't know | | Mean of score M.S | Comparative Significant |
|--------|--|--------|------|----------|------|--------------|------|--------------------------|-------------------------|
| | | F | % | F | % | F | % | | |
| 1.3.1 | Child being away from house – Animals (pet animals) | 27 | 54 % | 10 | 20 % | 13 | 26 % | 2.28 | H |
| 1.3.2 | Avoid allergic food which increase time of attacks | 35 | 70 % | 6 | 12 % | 9 | 18 % | 2.52 | H |
| 1.3.3 | Protect the child from temperature differences | 38 | 76 % | 11 | 22 % | 1 | 2 % | 2.74 | H |
| 1.3.4 | Avoid smoking inside the house | 33 | 66 % | 14 | 28 % | 3 | 6 % | 2.60 | H |
| 1.3.5 | Avoid Insecticides in side the house | 41 | 82 % | 0 | 0 % | 4 | 8 % | 2.82 | H |
| 1.3.6 | Clean house to remove dust | 39 | 78 % | 6 | 12 % | 5 | 10 % | 2.68 | H |
| 1.3.7 | Observing child during playing (running) | 31 | 62 % | 14 | 28 % | 5 | 10 % | 2.52 | H |
| 1.3.8 | Observing child during crying and laughing | 36 | 72 % | 8 | 16 % | 6 | 12 % | 2.60 | H |
| 1.3.9 | Let child cough to clear lung from mucus | 25 | 50 % | 3 | 6 % | 22 | 44 % | 2.06 | H |
| 1.3.10 | Regular practice of breathing exercise | 11 | 22 % | 3 | 6 % | 36 | 72 % | 1.50 | L |
| 1.3.11 | Regular intake of treatment | 29 | 58 % | 17 | 34 % | 4 | 8 % | 2.50 | H |
| 1.3.12 | Helping him to taking treatment | 39 | 78 % | 7 | 14 % | 4 | 8 % | 2.70 | H |
| 1.3.13 | In case of attack going to hospital directly | 36 | 72 % | 13 | 26 % | 1 | 2 % | 2.70 | H |

H= High Information M= Moderate Information L= Low Information M.S= Mean of score F: Frequency %: Percentage

This table shows that the mean of score of them was low information on item (10), and highly information for the rest of items.

Table 5. Association between Mothers' Information Regarding Asthmatic Child Care and their Ages

| Scales Ages of mother | I know | | Not Sure | | I don't know | | Total |
|--------------------------------|------------|--------------|------------|-----------------------------------|--------------|----------------|-------------|
| | F | % | F | % | F | % | |
| Less than 18 years | 17 | 1.90 | 2 | 0.96 | 7 | 3.53 | 26 |
| 18 - 22 years | 75 | 7.89 | 15 | 7.21 | 14 | 7.07 | 104 |
| 23 - 27 years | 331 | 37.02 | 78 | 37.5 | 84 | 42.42 | 493 |
| 28 - 32 years | 296 | 23.37 | 74 | 35.57 | 47 | 23.73 | 417 |
| 33 - 37 years | 82 | 9.17 | 8 | 3.84 | 14 | 7.07 | 104 |
| ≥ 38 years | 93 | 10.40 | 31 | 14.90 | 32 | 16.16 | 156 |
| Total | 894 | 100 | 208 | 100 | 198 | 100 | 1300 |
| X² obs= 23.1 | | df=10 | | X² crit = 18.31 | | p≤ 0.05 | |

F: Frequency %: Percentage

This table shows there is a significant association between mothers' age and their information regarding asthmatic child care at level of P value ≤ 0.05.

Table 6. Association between Mothers' Information Regarding Asthmatic Child Care and their Level of Education

| Scales level Mothers' level of education | I know | | Not Sure | | I don't know | | Total |
|---|------------|---------------|------------|-----------------------------------|--------------|----------------|-------------|
| | F | % | F | % | F | % | |
| Illiteracy | 192 | 21.47 | 39 | 18.75 | 29 | 14.64 | 260 |
| Read and write | 283 | 31.65 | 70 | 33.65 | 63 | 31.81 | 416 |
| Graduate from primary school | 352 | 39.37 | 82 | 39.42 | 86 | 43.43 | 520 |
| Graduate from secondary school | 32 | 3.57 | 14 | 6.73 | 6 | 3.03 | 52 |
| Graduate from intermediate | 35 | 3.91 | 3 | 1.44 | 14 | 7.07 | 52 |
| Total | 894 | 100 | 208 | 100 | 198 | 100 | 1300 |
| X² obs= 17.7 | | df = 8 | | X² crit = 15.51 | | p≤ 0.05 | |

F: Frequency %: Percentage

This table shows there is a significant association between mothers' level of education and their information regarding asthmatic child care at level of P value ≤ 0.05.

Table 7. Association between Mothers' Information Regarding Asthmatic Child Care and their Child's Feeding

| Scales Child feeding method | I know | | Not Sure | | I don't know | | Total |
|--------------------------------|------------|---------------|------------|-----------------------------------|--------------|----------------|-------------|
| | F | % | F | % | F | % | |
| Breast feeding | 93 | 10.40 | 17 | 8.17 | 20 | 10.10 | 130 |
| Artificial feeding | 119 | 13.31 | 21 | 10.9 | 16 | 8.08 | 182 |
| Compound feeding | 275 | 30.76 | 64 | 30.76 | 51 | 25.75 | 388 |
| Diet feeding | 407 | 45.52 | 106 | 50.96 | 111 | 56.06 | 598 |
| Total | 894 | 100 | 208 | 100 | 198 | 100 | 1300 |
| X² obs= 10.9 | | df = 6 | | X² crit = 12.59 | | p≤ 0.05 | |

F: Frequency %: Percentage

This table shows there is no significant association between child's feeding and their mothers' information regarding asthmatic child care at level of P value ≤ 0.05 .

Discussion

Throughout the course of data analysis, the present findings indicates that most of the children (46%) their ages were (1 - 3) years, and (24%) of the children between age group (4 - 6) years. Most of the children's asthma develops before age five years, and more than half their asthma develops before age three⁽¹¹⁾.

Regarding the child gender the study findings (62%) were male. Asthma is two to three times more common in boys than girls until the onset of puberty, and it then equalizes during adolescence. The onset in adulthood is more common among female⁽¹²⁾. Regarding child feeding, the findings of the present study have shown that the (48%) of children eating food, this result are expected because the high percentage of children above the age of three years and more of them are feeding on food, like eating chips, sweets, and fast food.

Regarding age of child's mother the study findings (38%) of mothers' age between (23-27) years. Concerning of the mothers' level of education, the findings revealed (40%) graduated from primary school. There is an agreement with study done in Ghana about knowledge, beliefs and practices of parent/guardian with asthma, their findings (97.1%) fathers and (98.6%) mothers had attained at least primary education.

The result of table (2) shows that item (2), and item (5), obtains the highest mean of score. While item (6), obtains low mean of score, about allergic food. In general, the information of mothers about aggravating factors of asthma is good (average M.S = 2.70). The present studies agree with study done in Amsterdam, the Netherlands about the Asthma beliefs among mothers and children from different ethnic origins. All mothers have idea about aggravating factors of asthma. They know that the clean houses free from dust, no pets, healthy food, no smoking and plenty of exercise are factors which will help reduce asthma symptoms⁽¹³⁾.

The result of table (3) shows that the mothers' has high information about item (1) it is obtains the highest mean of score (2.82). But the mothers' has low information about item (5) which obtains low mean of score (1.98). The result of table (4) shows that item (5), obtains the highest mean of score (2.82), while item (10) obtains low mean of score (1.50) in which (22 %) of mother always make regular practice of breathing exercise (6%) mother some time make regular practice of breathing, (72%) mother never make regular practice of breathing. The mothers don't have information about regular practice of breathing can managing child from asthma attacks, this point to mothers'

ignorance of the importance of breathing exercises, presumably because local doctors had not educated them about such exercises and how to perform them, or to an inability of the children to practice them. These exercises, if practiced regularly, help to strengthen the respiratory muscles and reverse the conditions which aggravate asthma⁽¹⁴⁾.

The study findings have depicted that significant relationship between information of mother and age. From the study point of view this relationship is due to that the older mothers are more experience in dealing with children, especially children with asthma and how to care for them. As a result continues observe status of the child patient and follow up the recommendations of the doctors. The study done in Ghana about knowledge, beliefs and practices of parent/guardian with asthma, (65.2%) of respondents were mothers, (20,3%) were female guardians and (14.5%) were fathers. The study shows overall knowledge about asthma of the respondents was very high. As would be expected, mothers whose children had had symptoms for longer were more information probably due to their experience⁽⁹⁾.

Concerning mother level of education, a significant association has found with information of mother regarding asthmatic child care, an increasing maternal age is positively related to the educational, behavioural, and mental health development of children. The finding of this study consistent with study done in Netherlands about development of socio-economic health differences in the Netherlands, and to investigate possible explanations for socio-economic variation in childhood health. The health outcomes studied are common childhood health problems: eczema, asthma symptoms, general health, frequent respiratory infections and obesity. Which shows, maternal education level and health outcomes. In general, children for mothers with lower education levels are in poorer health than children of the most highly education mothers⁽¹⁵⁾.

Finally the study shows, there is no significant association between methods of child's feeding with information of mother regarding asthmatic child care. This study agree with study done about asthma and infant diet, the study shows the relationship of milk diet and solid feeding practices during the first 4 months of life to rates of early childhood asthma, the

results showed, there is no significant association between rates of asthma and breast feeding or solid feeding practices⁽¹⁶⁾.

Recommendations

1. Education program should be provided to the mothers who have children with asthma.
2. Course training program should be developed and implemented by ministry of health.
3. Further study should be done on large sample.

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