ASSESSMENT OF MOTHERS' HEALTH KNOWLEDGE REGARDING RICKETS IN CHILDREN[+]

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Abstract

The main aim of this study is to find out the mother's health knowledge about rickets .Data on mothers' health knowledge were collected using a special questionnaire . 1000 mothers were interviewed on the subject ., randomly selected from attendants of primary Health care centers (PHCC) in Baghdad Governorate .The results found that mothers who had high education level had better health knowledge concerning rickets, 98.2 % mothers were heard about rickets , and 93.3 % mothers know the symptoms of the disease . The mothers who live in urban area have more knowledge about rickets than mothers who live in rural area . And most of mothers did not know how to prevent the disease , 70.3 % of mothers from urban area , and 79.2% of mothers from rural area .The researcher recommend that the educational program in nutrition for the mothers should be carried out .

Key ward : Rickets , Health knowledge , Mothers.

المستخلص *:-*

إن الهدف الرئيسي من هذه الدراسة معرفة ثقافة الأم الصحية حول الكساح عند الأطفال . لقد تم جمع العينة باستخدام استمارة استبيان خاصة للأم لمعرفة ثقافتها الصحية واختيرت ألف أم عشوائياً عند زيارتهم إلى مركز الرعاية الصحية الأولية في محافظة بغداد . أظهرت النتائج أن لدى الأمهات المتعلمات بمستوى متقدم من التعليم ثقافة صحية حول الكساح اذ أن ٩٨,٢ % أم يسمعن بالكساح وان ، ٩٣,٣ % من الأمهات يعرفن أعراض المرض وإن الأمهات الساكنات في المدن لديهن ثقافة حول الكساح أكثر من اللائي يعشن في الريف . وأكثر الأمهات ليس لديهن معرفة بمنع المرض بنسبة ، ٧٠,٣ % من الأمهات في المدن و ٧٩,٢ % من الأمهات في الريف. توصي الباحثة بوجوب نشر برنامج الوعي الصحي الغذائي للأمهات .

Introduction

Children are born with a precious possession of health . Our role is to protect that health as long as possible at the highest level . [1] Child health status and child health care are the most important determinants of health status of the nation . [2]

The aim of health education is , by planned effects , to secure benefit that is health promoting changes in peoples, behavior[3] .Mothers health Knowledge and practices play a vital role in this respect , since they will be reflected on care provided to the child both qualitatively and quantitatively [4] , and she is the first and most important primary health worker for children . [5]

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Rickets is a disease of childhood characterized by softening of the bones as a result of inadequate intake of vitamin D and insufficient exposure to sunlight , also it is associated with impaired calcium and phosphorus metabolism [6] , Four mechanisms interfere with this process .

1. Geographical location and annual season , during the winter months ,of the sun remains low in the sky , for fewer hours .

2. Biological features mainly skin as pigmentation of the skin [7] . A study in 2000 in South Africa : appears that the Albino group has significant (P = 0.05) higher Vit D levels against the background of a similar dietary intake and similar exposure to sunlight / day length [8] .

3. Environmental changes, mainly atmospheric pollution.

4. Social and Cultural factors [7] .

The newborn infant is at high – risk because of the low vitamin D and underdeveloped 25–hydroxylase . Activity in liver [9] . This results in a bowing of longer weight bearing bones such as the femur .,tibia . and fibula of the legs [10] . And growth failure in infants thinning of the skull and fractures are common [11].
Bone also needs vitamin D, to move calcium from intestine to the blood stream and into bone [12] .

To prevent rickets small doses of Vit . D and sun shine exposure are effective with increasing urbanization , we must emphasize health education to promote sunshine exposure , breast feeding , and milk conteat of Vit. A andD [13] .

- The Aim of the Study

The main aim of this study is to determine the mother health knowledge about rickets .

Subjects and Methods

The subjects were mothers who had children under five years . the study was conducted in Baghdad Governorate during 2000-2001 . The study subjects were randomly selected mothers attending primary health care centers (PHCC) .The study was carried out in (PHCC) which were selected through a multi – stage from rural and urban area . One thousand mothers whose children were below 5 years of age were selected , 779 mothers out of them lived in urban area and 221 mother lived in rural area they were interviewed to obtain information on rickets , their knowledge about.

Data on mothers' health knowledge about rickets were collected using a special questionnaire including education levels of mothers, and their residence .

Statistical Analysis

Frequencies , percentages and kolmogorov smirnov test analysis .

Result

The result reveals that the levels of mother education an primary and secondary in 299 (29.9%) and 341 (34.1 %) respectively from 1000 women (all subjects) . The researcher found that the majority of mothers from 1000 mothers (90.9 %) heard about rickets . Coaversely the majority of mothers 74.4 % , 72.3 % did not know the cause and heard how to prevent rickets respectively .

Table –1- The association between mothers' education levels and health knowledge about hearding , cause and symptoms of rickets disease .

Mothers' knowledge	A				B				C				
	Heard about rickets				Cause the disease				Symptoms of disease				
Education levels	Yes		No		Vit D dif		Not know		Effect the bone		Not know		Sum
	N	%	N	%	N	%	N	%	N	%	N	%	
Illiterate	70	72.9	26	27	7	7.3	89	92.7	36	37.5	60	62.5	96
Read and write	85	85	15	15	4	4.0	96	96	43	43.0	57	57.0	100
Primary	267	89.3	32	10.7	33	11.0	266	89.0	168	56.2	131	43.8	299
Secondary	326	95.6	15	4.4	144	42.2	227	66.6	276	80.9	65	19.1	341
University and above	161	98.2	3	1.8	98	59.8	66	40.2	153	93.3	11	6.7	164
K-S (c.s) p-Value	(S) 0.984				(N.S) 0.688				(N.S) 0.766				

Table - 1 – Table (a) shows that 98.2 % of mothers with high levels of education heard about rickets . Table (b) reveals the mothers with read and write education level were 96 % they donot know the cause of rickets disease while with mothers with high educational levels also they know the symptoms of rickets disease by effect the bone

Table -2- the table reveals the association between mothers education levels and their health knowledge about prevent rickets disease .

Mothers' knowledge	Prevention of rickets disease					
	Not know		Exposure to sun		Give vit D	
Education levels	N	%	N	%	N	%
Illiterate	86	89.6	7	7.3	1	1.0
Read and write	90	90.0	10	10.0	1	1.0
Primary	255	85.3	40	13.4	4	1.3
Secondary	222	65.1	111	32.3	11	3.2
University and above	70	42.7	86	52.4	25	14.6

- The answer was more than one .

Table -2- The table shows that 52.5 % if mothers with high level of education were know how to prevent rickets (exposure to sun light) .On the other hand 90% mothers who read and write only not know how to prevent the disease .

Table- 3 – The table reveals the association between mothers health knowledge about rickets and living site of the mothers .

Mothers knowledge	Heard about rickets				Cause the rickets				Symptoms				
Living site	Yes		No		Vit Deficiency		Not know		Effect the bone		Not know		Total
	N	%	N	%	N	%	N	%	N	%	N	%	
Urban	726	93.2	53	6.8	215	27.6	564	72.4	553	71.0	226	29.0	779
Rural	183	82.8	38	17.2	41	18.5	180	81.4	123	55.6	98	44.3	221
K-S (c.s) P-Value	(S) 0.999				(S) 0.999				(S) 0.999				

Table -3- The (a) reveals that the mothers living in urban area 93.2 % heard about rickets while table(b) shows the mothers living in rural area were 81.4 % do not know about the causes the disease and that table (c) shows that 71% of mothers living in urban area know the symptoms of disease by effect on the bone . The table shows the significance at $p \leq 0.05$.

Table -4- The table shows the association between mothers health knowledge about rickets and living site of the mothers .

Mothers knowledge	Prevention of rickets					
	Not know		Sun Exposure		Give vit D	
Living site	N	%	N	%	N	%
Urban	548	70.3	211	27.1	34	4.4
Rural	175	79.2	43	19.5	7	3.2
K-S (c.s) P-Value	(S) 0.999					

- Total is more than 1000 because The answer was more than one .

Table -4- The table shows that 70.3% 79.2 % mothers lived in urban and rural area, donot know how to prevent the rickets respectively .

Discussion

The researcher found that most of the mothers who were illiterate and read and write do not know how to prevent rickets by exposing the child to sun that the reason is a common problem .This finding is in agreement with AL – Rawi and et al who found that rickets is still a common problem in our country during the infancy and early childhood and it was found that most of the rickety children were not exposed to sun [14] .

The researcher found that the mothers with higher education levels have health knowledge about rickets more than mothers with low education levels. This finding is supported by Ministry of Health in Iraq in 1999 as it mentioned that mothers with low levels of education have children with high morbidity and mortality rates than those with high levels of education . [15]

The study found that educated mothers know the cause , symptoms and the prevention of the rickets by taking vitamin D. and exposure to sun and the disease affects child bones . This finding agrees that of Rodwell 1993 and Dworkin 2000 mentioned that rickets results from inadequate intake of vitamin D and insufficient exposure to sun light . [6+11] .

The study found the mothers who lives in urban area have knowledge about the cause and symptoms . The researcher found rickets affects the children in urban area more than in rural area. This opinion is supported by Dworkin 2000 who mentions that urban living condition is one of the causes of rickets .[11] Cornish et al. 2000 mentioned that the atmospheric pollution in town is another one of the cause of rickets [7] . this is in agreement with Kin and Burgess 2003 who write that in towns with high building and narrow streets so little sun light may get to children and who easily get rickets .Most people who live in sunny places have enough vitamin D. [16] .

Conclusions

1. The mothers who have high education levels have better health knowledge about rickets .

2. The mothers who live in urban area know about rickets more than mothers who live in rural site .

Recommendation

1. Nutrition education program for mothers should be carried out .
2. A nutritional surveillance system , must be established .
3. Further studies on the rickets to provide additional data , are needed

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