

## Mother's attitudes toward obesity among school children in Babylon

### اتجاهات الامهات نحو السمنة لدى اطفال المدارس في بابل

**Dr. Salma K. Jihad, PhD**, Assistant professor, College of Nursing,  
University of Babylon

**Dr. Najih Hamza, PhD**, Assistant professor, College of Nursing,  
University of Babylon

#### الخلاصة:

**الخلفية:** تعد السمنة من المشكلات الاجتماعية المؤثرة من قبل منظمة الصحة العالمية والواسعة الانتشار وتسمى سمنة على مقياس الكتلة بوزن اعلى من 30 كغم / مربع الطول وبناءاً على مؤشرات منظمة الصحة العالمية حيث اوجدت ان اكثر من بليون ونصف البليون من الاشخاص البالغين يعانون السمنة ويعتبر والدين والام بشكل خاص لهم الدور الاكبر في اختيار وتهيئة الطعام.

**الهدف:** الهدف من الدراسة الحالية هو التعرف على اتجاهات الامهات نحو السمنة لدى الاطفال في سن المدرسه.

**منهجية البحث:** دراسته مقطعية اجريت في مركز الكوثر للرعاية الصحية الاولى في بابل الفترة 4/1 - 10/1 / 2012 للتعرف على توجهات الامهات نحو السمنة بين اطفال المدارس وقد اختيرت عينة غرضية وبالطريقة العشوائية من (50) ام تراجع المركز المذكور ولديها اطفال مسجلين في المدرسه للوصول الى هدف البحث. تم بناء استبيان تتضمن المعلومات الديموغرافية والمعلومات الخاصة بالاتجاهات لغرض جمع العينة وللوصول الى النتائج استخدم الباحثان طريقه التوزيع التكراري،النسبة المئوية،الوسط والانحراف المعياري،والاختبار التائي

**النتائج:** من مجموع العينة المختاره والبالغ عدد الامهات (50) كانت اعلى نسبة لاعمار الامهات ما بين 25 - 28 سنة ونسبه (82%) منهم لا يعملن ، وللوصول الى هدف البحث اعتمد الباحثان مقياس ليكرت ذو الخمس مستويات لتحديد الاتجاهات وتم تصنيف الاستجابات الخاصة بالعينة على اساس الايجابي والسلبي ، وبترتيب الاستثمارات الاستبائية تنازلياً استعمل الاختبار التائي للوصول الى دلالة النتائج حيث تم التوصل الى ان اتجاهات الامهات كانت سلبية نحو السمنة وحسب القيمة المحتسبه وهي (1.22) وبمستوى دلالة (0.05) .

**الاستنتاج:** اهم الاستنتاجات التي توصل اليها الباحثان ان لدى الامهات اتجاهات سلبية تؤثر على حدوث السمنة مثل اعتبارها من المكملات الجمالية او هناك اخطاء باختيار الاطعمه او طريقه طبخها او اغفال الام عن بعض الممارسات لدى الاطفال مثل الاعتماد على مواد غير مفيدة كغذاء.

**التوصيات:** توصي الدراسة بضروره اعتماد وسائل توعيه للامهات للتأثير على اتجاهاتهم وتغيير سلوكهن بتهيئة الاطعمة الخاصة فيما يخص موضوع السمنة لدى الاطفال وخاصة اطفال المدارس لوجود عوامل خطوره بسبب الوزن الزائد وكذلك اعتماد وزاره الصحة هذا الموضوع كبرنامج وطني وتضمنين مجالس الاءاء والامهات مواضيع تخص صحة ابناءهم

#### Abstract:

**Background** Obesity has been declared by the (WHO) as a major public health problem and global epidemic, in general a body mass index of 30 kg/m<sup>2</sup> or greater is considered obese, and according to the WHO too more than 1.5 billion adults are overweight, parents and mothers play a great role in choosing and preparing food

**Objective:** The aim of the current study is to identify the attitude of mothers toward obesity among schoolchildren.

**Methods and materials:** A cross-sectional study was carried out in Al- Kawthar primary health center in Babylon between the 1<sup>st</sup> of April to the 1<sup>st</sup> of October to identify the attitude of mothers toward obesity among school children. A convenient random sample size of (50) mothers was selected to accomplish the study.

**Results:** Total number of the mothers was 50 majority were aged from 25-28 years old, mothers who are not working represent (82%), to achieve the aim of the study and for the identification of the attitude of the mothers the researchers determine the sample scores within the positive and the negative attitude by using lekert scale of five levels and according to that it was found that sample has negative attitude t- test tabulated value represented (1.22) at p (0.05). the most important results was that negative attitudes affect obesity like it is considered as a beauty sign or conducting such a selection and cooking mistakes or dealing with some practices like consuming unhealthy food. Study recommended the importance of using of the educational aids to change their attitudes and practices about food preparation and selection especially with the school children because of the risk and also MOH must conduct this subject as a National health program and include that in the parents- school meetings.

**Conclusion:** The study concluded that there were poor levels in knowledge and attitude of mothers toward obesity among children school.

**Recommendation:** The present study recommended that Ministry Of Health must develop programs to follow up any children gaining abnormal weight as, this health problem must be included in the meeting of the school and parents give more information to mothers about the same issue to enforce or change their attitudes.

**Key words:** Attitude, schoolchildren, obesity, body mass index

## INTRODUCTION:

Obesity is a major public health problem and global epidemic, to indicate obesity a body mass index must point a 30 kg/ m<sup>2</sup> or greater. This clearly declared by the WHO in 1997 (1). According to the same reference it is estimated there will be more than 1.5 billion adults are overweight. And of those over weights 200 million men and nearly 300 million women. To assess the health and the nutritional status of adults and children the National Health and Nutritional Survey examination data indicate an obesity prevalence of 32.2% for men and 35.5% for women from 2007-2009. (2). another biostatistics indicated 17% of children aged from 2-17 years old are indicated as obese. The obesity rate has tripled for preschool children and , but it has quadrupled for children 6-11 years of old, obese children are more likely to become obese adults. The poor eating habits that develop during childhood are generally thought to persist into adulthood, contributing to the leading cause of death and disability. (3). Parent- Child dyad, knowing the parent attitudes about eating habits, food preparation and dietary guidelines is crucial to addressing childhood obesity. Parents of African American and Hispanic descent participated in focus groups to explore mothers and children attitudes and practices regarding the food choices they make for themselves and their 6-12 year-old children.(4) among factors that mothers knowledge and awareness reported poor determination are. Television viewing associated with higher intake of fats, sweet and salty snacks, and carbohydrates drinks, lower intake of fruits and vegetables. Watching television while eating meals linked to poor food choices. (5) Parents are supportive of increasing physical exercise and emphasizing nutritional food, passive activities and increase sports and physical activity. (3). Strong direct relationship exists between socio-economic status and obesity. A review of social attitudes toward obesity thinness and reveals values congruent with the distribution of obesity, they include restraint and physical activity (6), (5).

The aim of the study was to identify the attitude of the mother toward obesity among school children.

## SUBJECT AND METHODS:

**Study design and sample:** A cross- sectional study was carried out in Al- Kawthar health center in Babel from the 1<sup>st</sup> of April to the 1<sup>st</sup> of October 2012. A convenient random sample size of (50) mothers was selected to accomplish the study.

**Materials and population:** The population in this study involves mothers who registered in Al- Kawthar health center in Al- Askan region, Babylon. Total number of mothers having school children was about 250. For the purpose of the study, a written official letter has been obtained from the College of Nursing and submitted to the Primary Health Center.

To achieve the aim of the study the researchers constructed a special questionnaire using (Likert's scale), which situated between (strongly agree) to (strongly disagree) to

measure each item in the questionnaire. Which consists of (28) items, Validity was obtained by the experts from Nursing and Psychology fields. Reliability was obtained by the lowest score for the response of mothers was (28) and the highest (140). And by using the t-test to investigate the significance of the same items result found a t-test value (1.54) at df of (49) and p value  $\geq$  (0.05) which is highly significant.

**Procedure:** After obtaining the permission of the mother to participate in the study, an interview- based study was performed. The data is collected by the investigators that including general or demographic data as well as information on attitude.

**Statistical methods:** A different statistical methods were used to achieve the aim of the present study, frequency, percentage, analysis of the items was done by differentiate between mothers gain high scores and low. Mean ,standards deviation and t- test were used to identify the significant between the items of the questionnaire, for the correction of the same scale.

## RESULTS:

the results of the present study revealed that the total number of mothers were (50) the following table shows the demographic data

**Table (1) demographic data for the study samples**

Demographic data	No.	%
<b>Age:</b>		
• 21-24	7	14
• 25-28	34	68
• 29-32	4	8
• 33 and above	5	10
<b>Educational level:</b>		
• Not reading and writing	4	8
• Read and write	6	12
• Primary	8	16
• Secondary	29	58
• College and above	3	6
<b>Occupation:</b>		
• Working	9	18
• Not working	41	82
<b>Address</b>		
• Rural	0	0
• Urban	50	100
<b>No. of school children in the family</b>		
• 1-3	43	86
• 4 and above	7	14
<b>Economic satisfaction</b>		
• Satisfaction	28	56
• Non satisfaction	22	44
<b>Total</b>	50	100

Table (1) shows the distribution of the sample according to age, education, occupation, address, number of schoolchildren in the family and level of economic satisfaction.

Results reveals that majority of the sample age represents (68%) mothers aged from (25-28) years old, mother's highest percentage (58%) are mothers of secondary school education. The same table shows that (82%) are not working, while (86%) are families with schoolchildren from 1-3 in the family and (56%) are mothers satisfy their economic life.

**Table (2) Analysis of attitudes items weight.**

Mother's attitudes in general	Highest scores group		Lowest scores group	
	Mean	Standard deviation	Mean	Standard deviation
1. Obesity is a sign of health deprivation	4.52	1.32	1.85	0.72
2. Obesity is a worrying issues	4.20	1.56	1,59	1.58
3. There is future health effects of obesity	4.28	1.68	2.54	1.62
4. There is negative body image opinion of obesity	4.65	1.38	1.49	1.42
5. Child's physical activities is affected by obesity	4.69	1.36	2.35	1.38
6. Obesity is a sign of beauty in the child	4.33	1.62	1,24	1.29
7. Food play role in the occurring of obesity	4.06	1.74	1.39	1.31
8. Physical activity reduce the possibility of obesity occurring	4.41	1.52	1.50	1.51
9. Checking the child weight is a concern	4.61	1.46	1.91	1.60
10. Obesity is one of the up-to-date subject regarding children	4.28	1.31	2.60	1.46
11. Obesity is a health problem of the school children	4.31	1.34	1.56	1.40
12. There is residual physical effects of obesity for the future	4.04	1.45	3.45	1.66
13. Obesity can be controlled within the family	4.77	1.25	2.85	1.61
14. Education regarding food selection is important in the control of the obesity	4.76	1.68	1.05	1.57
15. Outdoor food play role in the incidence of obesity	4.56	1.33	1.91	1.68
16. Curbing food advertising directed at children one of causes that reduce the weight gain	4.77	1.46	1.83	1.43

Table(2) Shows the analysis of items using the mean and standard deviation to measure the attitudes toward obesity. All the results represent significant results, highest among the highest (4.77) for the items 13,16 . while as the lowest scores was calculated it is revealed that highest mean went to item 12.

**Table (3) Analysis of items using the t- test to measure the attitudes of the mothers**

Mother's attitudes regarding food selection	Highest scores group		Lowest scores group	
	Mean	Standard deviation	Mean	Standard deviation
1. Eating food more than body requirement is one of the important causes	4.75	1.43	1.93	1.50
2. Depending on special food like carbohydrates	2.83	1.03	1.88	1.38
3. Culture can affect the food habits like drinking dark tea	4.44	1.12	2.57	1.66
4. Food preparation can affect the body weight positively or negatively	4.85	1.16	1.33	1.52
5. Taking some unhealthy snacks can increase the weight	4.54	1.23	1.36	1.50
6. Fast-food is another cause of obesity	4.12	1.53	2.7	1.23
7. Junk food can increase the possibility of obesity	2.50	2.55	2.67	2.53
8. Snacking increases while watching TV or movies	4.84	0.87	3.32	0.76
9. late-night screen time may interfere with getting adequate amounts of sleep	4.41	1.4	3.52	1.30
10. Ate fewer family meals, had greater consumption of sweetened beverages	4.80	1.20	1.21	0.58
11. Ate fewer vegetables than did teenagers without a bedroom	4.56	1.27	3.80	1.23
12. Food like and dislike among children can affect the body weight	4.12	1.20	1.20	1.52

Table (3) Shows the analysis of items using the mean and standard deviation to measure the attitudes toward obesity regarding food selection. All the results represent significant results item 4 represent the highest as mean. while high mean among low scores found in item 11.

**Table (4) Distribution of study sample according to their attitudes**

Attitudes	Negative attitude	Neutral	Positive attitude	Total
Sample Scores	42	_____	8	50
Percentage	84	_____	16	100

Table No. (4) revealed that (84%) of the sample had negative attitude toward obesity and (16%) reported positive attitude this was done by arranged the sample responses as descending order from the highest responses to the lower ones. Which started from 140 to 28, but there is no Neutral response.

**Table (5) Scores mean standard deviation of the study sample**

Attitudes	Standard Deviation	Mean	t -test	P value
1-16 (mother's attitudes in general) 1-12 (food selection)	4.55	72.75	1.22	0.05

In order to indicate the significant of the sample responses Table (4) Shows that the mean sample score was (72.75), standard deviation (4.55) and after applying the t – test to identify the significance results was (1.22) at P value (0.05) and this means that mothers have negative attitudes toward children obesity.

## DISCUSSION:

This study identified the attitudes of the mothers toward the obesity of their school children, the age group revealed mothers of the middle age, cultural and socioeconomic state play an important role in the development of attitudes and practices toward obesity among children, this agree with many studies.(7) (1).

Mother's economical satisfaction is very crucial to secure the family life, an article mentioned that it is true when they examined obesity among minority parents, the study recommended that health care practitioners working with families to reduce the incidence of obesity (4) (8).

Mothers are less aware to some practices that develop this critical condition and this clearly identified when they think that obesity is a sign of good health, and they must not feel worry for that, neglecting the fact that obesity can lead to the most chronic diseases (hypertension, diabetes cardiovascular disorders and others) and the future effect of obesity on their children (5), (10).

Sample attitudes was found negative regarding the body image of the obese child, did not know that the child will be affected by the over body weight, unable to move freely, and performing physical activities. So many issues regarding the food that mothers attitudes found negative, unusual food consuming play a role in developing overweight (3) (11)

The results that mothers negatively looking to the fact that food choices is curial specially fast food restaurants watching Television while eating meals linked to poor food choices, viewing television has been associated with high intake of fats, sweets and salty snacks and carbohydrates drinks lower intakes of fruits and vegetables, food is the most heavily advertised product on children's television and highly sweetened products and fast food (5) (12) (13).

The present study revealed that also there is a very important attitude which clarify by the mothers the family role in controlling the pattern of food consuming by the school child, providing vegetables and fruits and the education regarding this, and having less out door meals, encouraging for home meals specially when mothers are employed (7)(11)(8).

Food that increase opportunity of weight gain like high carbohydrates, unhealthy snakes, great consumption of sweetened beverages are crucial in the issues of obesity, encourage the child to reduce them to somehow is the mother responsibility by providing the good food in the proper time specially when the child getting hungry (4) (12)(14).

## CONCLUSION:

The recent study was designed to identify the attitude of mothers toward their children obesity, in Babylon. Mothers must be more educated and it is the responsibility of the health care provider to increase her knowledge to correct the attitudes, initiate referrals for health care provider follow up in collaboration with parents of students at risk for obesity.

## RECOMMENDATIONS:

1. Developing a program by the MOH (Ministry Of Health) to follow up any children gaining abnormal weight as in the other programs emerging because of urgent needs.
2. As the parents are invited by the school to discuss the subjects of the academic progress and other issues, it will be very crucial to deal with such health concern as obesity
3. Construct educational programs by the primary health centers that focus on the concepts and the attitudes of the parents and the community in general regarding the weight gain
4. This health problem must be considered as one of the important up-to-date subject in the health instructions given to the mothers when they visit the health care institutions for any reason

## REFERENCES:

1. Rohana, N, Nathotuwa obesity among children, 2012, obesity, WHO report pages 3-11
2. Ellesse cunningham, RD; Where can I find obesity statistics, obesity, 2010, Vol. 110, Issue 4, April page 656.
3. Mattson Carol, Porth, Essentials of pathophysiology concepts of altered health status, 2007, second edition, Lippincott Williams & Wilkins, Philadelphia p. 172-173
4. Johnson, SL, Birch parent's and children's adiposity and eating style, pediatrics, 1994, Volume 94, Issue 5, pages 653-661
5. Ann, Judith, Rector Chari, et al 2010 Community Health Nursing, promoting and protecting the public's Health, 7<sup>th</sup> edition, Wolters lower/ lippincott Williams and wilkins p. 857-858
6. Cawley, J, Liu, Maternal employment and childhood obesity: A search for mechanisms in time use data 2012, economic and human biology December Volume 10, and Issue 4 pages 352-364.
7. Gillman, M, W, Rifass shiman & et al, family dinner and diet quality among older children and adolescent, 2000, Archives of family medicine Volume 9, Issue 3, pages 235-240
8. Yvette, M, Sealy, and parent's food choices: Obesity among minority parents and children, pediatrics 2012, March 1, Volume 13, Issue 3, pages 201-208
9. Ahmed, Kareema, eating habits of secondary school students in Erbil city, Kufa journal for Nursing Sciences 2011, Vol. 1, Number 1, pages 12, 13
10. Birch L.L, J. O, Fisher, Mother's child- feeding procedures influences daughters, eating & weight American Journal of Clinical Nutrition 2000, pp 1054-1061
11. Jean, Burley & Kathleen Gaffney, Maternal-child practices and pediatric overweight / Obesity in the United States and Chile: A comparative study, Journal of pediatric nursing, 2012, volume 27, Issues 5, October pages 44-49

12. Carper J.L, Fisher Orlet & Birch, L.L. Young girls' emerging dietary restraint and disinhibition are related to parental control in child feeding, *Appetite* 2000, 35(2), pp 121-129
13. Birch, L.L, Davion, parents and children adiposity and eating style, *pediatrics clinics of North America*, 2001 Volume 48, Issue 4, pages 893-907
14. Lobstein, T, & Baur, L, Obesity in children and young people's a crisis in public health, *obesity review*, 2004, Volume 5, Issue 1, pp. 110-120