

The Effect of Educational Program on Mother's Knowledge Regarding Child's Weaning

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ABSTRACT

Background: An instructive program related to nutrition is characterized as Any set of learning encounters planned to encourage intentional food possession and other nutrition-related behaviors conducive to health and well-being.

Aim: The study aims to investigate the effects of structural program on mothers' knowledge regarding weaning. Subjects and

methods: The present study was carried out in Mosul City, four health care centers, 112 mothers who fulfilled the criteria. A structured Knowledge Questionnaire was filled for each one by ticking the correct answer. A pre special questionnaire was performed for knowledge take the correct answer then explain the educational program, mothers were intervanted through five days sessions related to healthy weaning and basic nutritious food which were targeted directed to enhance knowledge of mothers about health food and hygein The questionnaire filled again after intervention as a post-test on the fifth day. Data was analysed to Frequencies and percentages were created for variables. The chi-square test, Fisher Exact test, and Z-test for two proportions. The ethical approval was gotten from the College of Medicine the College of Mosul and the Nineveh health directorate Ethical Committee.

Results: For the socio-demographic characteristics 44.6% of participants were aged between 16-24 years and majority of participants were housewives and half of participants reported getting weaning information from family. Most of the questions were statistically significant except for Essential qualities of weaning food and Wait until the infants are 3-6 months was not significant

Conclusions: Education of the mothers with structural educational program was succeeded in providing mother with good information regarding adequate nutrition in improving complementary feeding knowledge.

Keywords: Educational, program, knowledge, child, weaning.

أثر البرنامج التربوي على معرفة الأمهات بفطام الطفل

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الخلاصة

الخلفية: يتميز البرنامج الإرشادي المتعلق بالتغذية بأنه أي مجموعة من لقاءات التعلم المخطط لها لتشجيع الحيازة المتعمدة للطعام والسلوكيات الأخرى المتعلقة بالتغذية التي تؤدي إلى الصحة والرفاهية.

الهدف: هدفت الدراسة إلى معرفة تأثير البرامج الهيكلية على معرفة الأمهات بالفطام.

الموضوعات والطرق: أجريت الدراسة الحالية في مدينة الموصل بأربعة مراكز رعاية صحية ، و 112 أم استوفيت المعايير. تم ملء استبيان معرفي منظم لكل واحد من خلال تحديد الإجابة الصحيحة. تم إجراء استبيان مسبق خاص للمعرفة أخذ الإجابة الصحيحة ثم شرح البرنامج التعليمي ، تم مداخلة الأمهات من خلال جلسات مدتها خمسة أيام تتعلق بالفطام الصحي والأطعمة المغذية الأساسية والتي كانت موجهة لتعزيز معرفة الأمهات بالأغذية الصحية والنظافة. مرة أخرى بعد التدخل كاختبار لاحق في اليوم الخامس. تم تحليل البيانات إلى التكرارات وتم إنشاء النسب المئوية للمتغيرات. اختبار خي مربع ، واختبار فيشر الدقيق ، واختبار Z لنسختين ، وقد تم الحصول على الموافقة الأخلاقية من كلية الطب ، جامعة الموصل ، ومن اللجنة الأخلاقية لدائرة صحة نينوى.

النتائج: بالنسبة للخصائص الاجتماعية والديموغرافية ، كان ٤٤.٦٪ من المشاركين تتراوح أعمارهم بين ١٦-٢٤ سنة ، وكانت غالبية المشاركين ربات بيوت ، وأفاد نصف المشاركين أنهم حصلوا على معلومات الفطام من الأسرة. كانت معظم الأسئلة ذات دلالة إحصائية باستثناء الصفات الأساسية لطعام الفطام وانتظر حتى يبلغ الأطفال ٣-٦ أشهر ليست ذات دلالة إحصائية في معرفة التغذية التكميلية.

الكلمات المفتاحية : التقويم ، البرنامج التربوي ، الموقف ، ممارسة الفطام .

INTRODUCTION

Weaning may be a handle by which nourishments other than breast milk are introduced slowly into the baby's count calories after the primary six months of life to at first complement the breast drain and after that to wean completely off the breast milk¹. Adjusting newborn child weaning confers both short-term and long-term benefits to a child such as a decrease in the rate of diseases and mortality among newborn children, and a change in mental and body development². Newborn children ought to be exclusively breastfed for the primary six months taken after by breastfeeding in conjunction with complementary nourishments for up to two a long time of age or beyond³. The primary two years of life are the basic stages for a child's development and improvement. Any harm caused by wholesome insufficiencies during this period seems to lead to impeded cognitive improvement, compromised instructive accomplishment, and mood financial efficiency². The World health Organization (WHO) characterizes weaning as complementary nourishing, starting when breast milk alone is deficient to meet newborns' dietary needs and extra nourishments and fluids are required in addition to breast milk.⁴ Looking at the potential of women's information in infant bolstering to upgrade instruction. Culture can altogether influence a community's well-being by cultivating unmistakable standards and values⁵. Teaching moms is considered one of the client's rights and one of the fundamental authorizing lists for a health center. Whereas usually happening, healthcare specialists emphasize instruction centered on mothers' needs for weaning less frequently, which is greatly likely to engender erroneous weaning-related social thoughts among moms⁶. Flawed weaning procedures may be dependable for as much as 50% of all childhood mortality due to a lack of healthy sustenance and its impacts⁷. In order to encourage communities to adopt a proper nutrition to new born children, understanding mothers' social thoughts around nursing and maternal nourishment is vital to teaching the community⁸. This can be achieved by applying structural an educational program. A structural program related to nourishment is any

set of learning encounters planned to encourage intentional food possession and other nutrition-related behaviors contributed to health and well-being⁹.

Aim of the study

The study aims to investigate the effects of structural program on mothers' knowledge regarding weaning.

Subjects and Methods

Scientific and ethical approval was gained from the scientific committee in the Family and Community Medicine Department College of Medicine at the University of Mosul and Nineveh Health Directorate training center. Verbal agreement and written consent were taken from each woman participating in the study. An intrventional design was used to achieve the aim of the study. The present study was carried out across four health care centers in Mosul City, four health care centers from 1/12/2022 to 1-4-2023, and a sample of 112 mothers who fulfilled the criteria. A mother of a child aged between 4 months to 24 months attending a health care center vaccination unit, In addition, those who accept to participate were included. Mothers who have a child with any illness and congenital anomalies and mothers with exclusive breastfeeding were excluded. A structured knowledge questionnaire multiple choice was filled for each woman by ticking the correct answer. A pre special questionnaire was performed for knowledge take the correct answer then explain the educational program as follow:

Intervention delivering process: five days session targeted to healthy weaning and basic nutrition elements which were delivered to increase the knowledge of the mothers about healthy food, mothers were intervented through five days sessions related to healthy weaning and basic nutritious food which were targeted directed to enhance knowledge of mothers about healthy food and hygein. During these days mother were educated about weaning when start how and for how long. How long breast milk provides all the

nourishment to the infant, When weaning should be started, Why weaning is important for infants, Type and consistency of preferred food, How many times a day weaning, Quantity of weaning food Initial weaning foods, How should feed the infant initially, Purees to more textured food How can reduce the risk of choking. Using lectures, handouts, and leaflets in addition to educational vedios and practice session about how to prepare and serving food in addition to proper hygein, The questionnaire filled again after intervention as a post-test on the fifth day. Knowledge qestionnarie included 15 questions each question scored and the total score classified according to Folasade et al, into low (from 0 to 5), average (from 6 to 8) and high (from 9 to 15) as a criterion for knowledge scores¹⁰ Depending on these criteria percentages get a category made to measure the level of knowledge of infants weaning as follows (< 50% low, 50–70% moderate, >70% high)^{1,2}. Data was entered on Microsoft Excel 2016, and then using social science statistical software package (SPSS) version 26 for analysis. Frequencies and percentages were calculated for variables. The chi-square test, Fisher Exact test, and Z-test for two proportions were used and computed among the variables, and the p-value (≤ 0.05) was considered statistically significant.

RESULTS

For the socio-demographic characteristics of the studied sample Table 1 shows that 44.6% of participants were aged between 16-24 years and majority of participants were housewives and half of participants reported getting weaning information from family. As seen in (Table 1).

Table (2) outlines the proper information knowledge before and after implementing the health guidelines educational program. With respect to the Meaning of weaning, 52.7% and 73.2% correctly before and after the implementation of the program, respectively. Regarding how long breast milk provides all the nourishment to the infant 33% &51.8% correctly answered revealing highly significant differences. With respect to when weaning ought to be begun, 30.4% and 46.4% accurately replied, respectively, uncovering critical contrasts. Concerning why weaning is vital for newborn children 42.9% and 72.3% accurately replied. In addition, all things sorts have noteworthy contrasts. Concerning the sort of nourishment that ought to be favored, 47.3% and 71.4% of detailed adjusted answers uncover critical contrasts. Concerning how numerous times a day weaning, 30.4% and 65.2% of the considered mother separately. Moreover, for the amount of weaning nourishment, 32.1% and

70.5%, For Introductory weaning nourishments, 31.3%, and 63.4%, Sorts of nourishments are to be given 46.4% and 67.9%, How ought to bolster the newborn child at first 40.2%, 55.4%, Purees to more finished nourishment 32.1% and 46.4%, How can diminish the hazard of choking 34.8% and 53.6%, Include iron-rich foods in a baby’s diet 27.7%, 44.6%, Fundamental qualities of weaning nourishment 56.3% and 64.3% and Holding up until the newborn children are 3-6 months, 42% and 46.4% were replied accurately but statistically not significant.

Table (1): Socio-demographic data of the studied mothers (n=112)

Socio-demographic characters	No	%
Age of mothers:		
16-24 years.	50	44.6
25-29 years.	25	22.3
30-48	37	33.0
Level of education:		
Illiterate	14	12.5
Primary	53	47.3
Secondary	28	25.0
Tertiary	17	15.2
Occupation		
Working mother	12	10.7
Housewife	100	89.3
Socioeconomic state (11)		
Upper class	35	31.3
Lower class	77	68.7
Types of family		
Nuclear family	46	41.1
Extended family	66	58.9
Sources of Information about weaning		
Media	19	17.0
Family	56	50.0
Health workers	37	33.0

Table (2): Distribution of the studied mothers according to their correct knowledge about weaning pre and post-intervention (n=112)

Weaning knowledge	Pre		Post		p-value *
	No.	%	No.	%	
Meaning of weaning	59	52.7	82	73.2	0.001
How long breast milk provides all the nourishment to the infant	37	33.0	58	51.8	0.004
When weaning should be started	34	30.4	52	46.4	0.012
Why weaning is important for infants	48	42.9	81	72.3	0.000
Type of food should be preferred	53	47.3	80	71.4	0.000
How many times a day weaning	34	30.4	73	65.2	0.000
Quantity of weaning food	36	32.1	79	70.5	0.000
Initial weaning foods	35	31.3	71	63.4	0.000
Essential qualities of weaning food	63	56.3	72	64.3	0.218
Types of foods are to be given	52	46.4	76	67.9	0.001
How should feed the infant initially	45	40.2	62	55.4	0.021
Purees to more textured food	36	32.1	52	46.4	0.027
Wait until the infants are 3-6 months	47	42.0	52	46.4	0.501
How can reduce the risk of choking	39	34.8	60	53.6	0.004
Include iron-rich foods in a baby's diet	31	27.7	50	44.6	0.007

*: Z test of two proportions (paired), the p-value is significant ≤ 0.05 . highly significant ≤ 0.001 .

DISCUSSION

The result of the present study showed that less than half of the mothers were aged 16- 24 years which is younger than reported in other study Al-Gashanin et al ¹¹ but similar to Metwally et al study ¹². This due to age of marriage in our community. Implementing educational interventions through using the structure educational program is widely recognized as effective in promoting public health knowledge regarding weaning ¹³, the present study objectives were to improve the weaning knowledge of mothers/parents/caregivers by introducing age

appropriate, diverse, nutrient-rich, and variety of food choices to achieve "Feeding babies like babies and promoting infants' growth". Referring to the WHO, 1998. ¹⁴, regarding success of the structural education program the rate was low knowledge information 52.7% and after the program become 90.2% which indicates the good effect of the program.

In the present study showing less than half of mothers were primary school, Metwally et al disagree with our results as the secondary school 47.5%. More than half of participants were extended family 58.9% and related to occupation most of them were housewives 89.3%. which similar to Metwally et al study findings ¹². regarding socioeconomic status more than half of mothers were lower class which agree with Nneka et al ¹⁶, about half of mothers get information from family which disagree with Tapti et al, ¹⁰.

Regarding Distribution of the participants according to their correct knowledge answers about weaning pre and post-intervention found that Meaning of weaning statistically significant, which is similar to Metwally et al study ¹² and disagree with How long breast milk provides all the nourishment to the infant. When weaning should be started found. Why weaning is important for. Type of food should be preferred. How many times a day weaning. Quantity of weaning food. Initial weaning foods. Types of foods are to be given. How should feed the infant initially. Purees to more textured food. How can reduce the risk of choking. Include iron-rich foods in a baby's diet, all above questions were statistically significant correspondingly. Which agree with Abd-El-latif et al ¹⁶ regarding to knowledge.

Regarding Essential qualities of weaning food and Wait until the infants are 3-6 months statistically not significant, which disagree with Al-Sayegh et al study that done in Mosul city in 2019, ¹⁷ unfortunately despite the present study educational program, still mothers have not convince of starting weaning at six months and prefer early or late weaning so this indicate future intervention need to recommended mothers.

CONCLUSIONS

Education of the mothers with structural educational program was succeeded in providing mother with good information regarding adequate nutrition of their infant and achieve improvement in timing with complementary process, this program was effective in improving complementary feeding knowledge. We should improving the knowledge information especially regarding "essential qualities of weaning food and wait until the age looks essential of infants are 3-6 months".

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