Effectiveness of an Educational Program on Mothers' Attitudes toward Readiness for Discharge Care at Home for a Premature Baby in Intensive Care Unit at **Teaching Hospitals in Medical City Complex**

فاعلية البرنامج التعليمي في توجهات الامهات تجاه الاستعداد لرعاية الخروج في المنزل للطفل المبتسر (الخديج)في وحدات العناية المركزة لحديثي الولادة في المستشفيات التعليمية بمجمع مدينة الطب

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الاهداف: لتقييم مواقف الأمهات تجاه الاستعداد لرعاية الخروج في المنزل للطفل الخديج في وحدة العناية المركزة في المستشفيات التعليمية في مجمع مدينة الطب ومعرفة العلاقة بين مواقف الأمهات وخصائصهن الاجتماعية والديمو غرافية.

منهجية البحث: تم تنفيذ تصميم دراسة شبه تجريبية خلال الفترة من 6 كانون الثاني 2020 إلى 11 اذار 2021 ، لتقييم فاعلية برنامج تعليمي حول مواقف الأمهات تجاه خطة رعاية الخروجللأطفال الخدج. أجريت الدراسة في مستشفيات التعليمية ومستشفى التمريض المنزلي ومستشفى بغداد التعليمي في مجمع المدينة الطبية في مدينة بغداد على 30 أم في وحدة العناية الذين تم اختيار هم باستخدام تقنية أخذ العينات غير الاحتمالية. تم تحليل البيانات من خلال استخدام مناهج المركزة لحديثي الولادة تحليل البيانات الإحصائية الوصفية والاستنتاجية.

أجريت الدراسة في المستشفيات التعليمية في مدينة الطب (حماية الطفل، مستشفى بغداد ومستشفى دار التمريض الخاص) في مدينة بغداد على 30 أم في وحدة العناية المركزة لحديثي الولادة. تم اختيار هن باستخدام عينة غرضية لأخذ العينات غير الاحتمالية. تتكون أداة الدراسة من 5 أجزاء ، الخاصية الديموغرافية الأولى والثانية لحديثي الولادة ، الحالة الاجتماعية والاقتصادية الثالثة ، معرفة الأمهات الرابعة ، مواقف الأمهات الخامسة. تم جمّع البيانات من خلال فترتين (الاختبار القبلي ، وبعد تنفيذ البرنامج التعليمي تم جمعها الاختبار البعدي)). أداة موثوقة من خلال استخدام موثوقية التكافؤ وصالحة من قبل فريق من الخبراء. التاريخ الذي تم تحليله باستخدام تحليل البيانات الإحصائية الوصفي والاستنتاجي.

النتائج: أشارت نتائج الدراسة إلى أن الأمهات في سن (23-29) سنة ، خريجات المرحلة الثانوية ، ربات البيوت ، من سكان الحضر ، قد خضعن لعملية قيصرية ، كان لديهن أيام كفترة مكوث في وحدة العناية المركزة لحديثي الولادة ، وكان لديهن مستوى معتدل من الوضع الاجتماعي والاقتصادي. كان للأمهات مستوى سلبي من التوجهات عند الاختبار القبلي ، وكان متوسط الدرجة (1.57) ، ومتوسط الدرجة في الاختبار البعدي (2.78) عند مستوى عال من التوجهات.

الاستنتاجات : ولخصت الدراسة إلى أن البرنامج التعليمي له فأعلية في تحسين معرفة الأم ووتوجهاتها حول خطة رعاية الطفل

الخديج عند الخروج من المستشفى. التوصيات: وأوصت الدراسة بعقد جلسات تدريبية للممرضين حول خطة الرعاية أثناء الخروج وتحسين توجهات الأمهات حول رعاية الأطفال الخدج في المنزل.

الكلمات المفتاحية: فأعلية البرنامج التعليمي ، التوجهات ، الاستعداد للخروج ، الطفل المبتسر (الخديج).

Abstract

Objectives:

To evaluate mothers' attitudes toward readiness for discharge care at home for a premature baby in Intensive Care Unit at teaching hospitals in Medical City Complex and to find out the relationship between mothers' attitudes and their socio-demographic characteristics.

Methodology: A quasi-experimental study design was carried out through the period of 6th January 2020 to 2021 to 11th March 2021, to evaluate mother's attitude toward discharge care plan for premature babies. The study carried out in Welfare Teaching Hospital, Nursing Home Hospital and Baghdad Teaching Hospital at Medical City Complex in Baghdad City on 30 mother of premature babies in neonatal intensive care units using the nonprobability sampling technique. The data was analyzed through the use of descriptive and inferential statistical data analysis approaches.

Results: The study findings indicated that most of the mothers are at age (23-29) years old, graduated from secondary schools, housewives, urban resident, and they had cesarean section delivery, they spend days at the NICU, with moderate level of socioeconomic status. Mothers had negative attitude at pretest mean score is (1.57), and at posttest mean score is (2.78) at high level of attitude toward readiness for discharge care at home for a premature baby in Intensive Care Unit.

Conclusion: The study concluded that the educational program has proved its effectiveness in improving mother's attitudes toward readiness for discharge care at home for a premature baby in Intensive Care Unit.

Recommendations The study recommend for Training session for the nurses about discharge care plan and improves the attitudes of mothers to implementation that attitudes of mother to care of the premature babies at home.

Keywords: Effectiveness of an Educational Program, Attitudes, Readiness for Discharge, Premature Baby.

Introduction

Having a premature baby brings feelings of confusion and anxiety to the mother. Preterm delivery is described by the American Academy of Paediatrics and the American College of Obstetricians and Gynaecologists as any neonate born before the end of the 37th week after the last menstrual cycle (1). Prematurity is the leading cause of death for new-borns, according to the Centre's for Disease Control and Prevention (CDC) (2) Even babies delivered at 35 weeks gestation have a higher risk of a host of illnesses, such as jaundice and respiratory issues, as well as prolonged hospital stays (2).

Parents feel elevated levels of depression and are often overcome by their feelings during their child's hospitalization. While the prospect of returning home from the hospital is exciting ⁽³⁾

Methodology

The study design is a quasi-experimental (One group), was carried out and the study started from the period of September 2020 to March, 2021 on mothers of neonates to

evaluate mothers' attitude toward discharge care plan. The study was carried out at NICU in welfare teaching hospitals, nursing home hospital and Baghdad teaching hospital in medical city. The research sample includes (30) mothers of premature babies in NICU. They are selected by using non probability sampling (purposive sample). The study instrument constructed depending on the neonate care plan literature reviews and previous studies related to the discharge care plan. It is a questionnaire format for the research purpose and composed of 5 parts and these parts are(Demographic Data Form for Socioeconomic Mother Status, Questionnaire about Mothers Attitude toward Discharge Care Plan, and Rating and Scoring of the Study Instrument) The validity of the questionnaire and the educational program were verified by presenting it to (11) experts. . Descriptive and inferential statistics were used to analyze the results of the study using the Statistical Package of Social Sciences (SPSS) version 25 and Microsoft Excel (2010).

Results

Table (1): Distribution of the Mothers by their Demographic Characteristics

Vari	Frequency	Percent	
	17-22	10	33.3
A	23-29	12	40
Age	30-36	6	20.0
	37-42	2	6.7
	Not read and write	3	10
	Primary	5	16.7
I aval of advection	Secondary	8	26.7
Level of education	Preparatory	6	20
	University	7	23.3
	MSC	1	3.3
	Employee	7	23.3
Occupation	Housewife	22	73.4
	Other	1	3.3
Residence	Rural	6	20
Residence	Urban	24	80
Type of delivery	NVD	8	26.7
Type of delivery	Cesarean section	22	73.3
	Hours	2	6.7
Period of child	Days	28	93.3
	Total	30	100
	Low	10	33.3
Socioeconomic status	Moderate	15	50
	High	5	16.7

The findings in the table (1) indicated that the age of mothers whom participate in the study between (23-29) years. This finding related small sample size and if the sample size is huge number may reflect result different from this finding and support the risk age for preterm labor is less than 17 and more than 35 years.

Table (2): Distribution the mothers attitude toward discharge care plan Levels of Assessment through the "Mean of Score" Among the Period of the Program (Pretest & Posttest)

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Period	Level of Assessment	Frequency	Percent	
	Negative (1-1.66)	21	70	
	Neutral (1.67-2.33)	9	30	
Pre-test	Positive (2.34-3)	-	-	
	Total	30	100	
	$\bar{x} \pm S.D$	1.57±0.148		
	Negative (1-1.66)	-	-	
Posttest I	Neutral (1.67-2.33)	-	-	
	Positive (2.34-3)	30	100	
	Total	30	100	
	$\bar{x} \pm S.D$	2.78:	±0.14	

 $\bar{x} + S.D.=Arithmetic Mean (\bar{x}) and Std. Dev. (S.D.)$

According to the result of the present study the pretest and posttest mothers' attitude about discharge care plan of preterm baby, table (2), indicated that mothers had negative attitude about care of preterm baby after discharge from the NICU at the period of pretest. While, the finding in

the posttest revealed that mothers had positive attitude about care of preterm baby after discharge from the NICU. Also, there are highly significant difference between the mean score of mother's attitude at the pretest and posttest.

Table (3): Difference Between Mother's Attitude at Pretest and Age, Education, Occupation and Socioeconomic Status

ANOVA		Sum of Squares	df	Mean Square	F	Sig.
	Between Groups	.078	3	.026	1.191	.333
Age	Within Groups	.565	26	.022		
	Total	.642	29			
Education	Between Groups	.181	5	.036	1.881	.135
	Within Groups	.461	24	.019		
	Total	.642	29			
	Between Groups	.016	2	.008	.350	.708
Occupation	Within Groups	.626	27	.023		
	Total	.642	29			
	Between Groups	.043	2	.021	.962	.395
SES	Within Groups	.559	27	.022		
	Total	.642	29			

d.f=degree of freedom, F= fisher test, sig=significant, NS: Non Significant at P > 0.05, S: Significant at P < 0.05, HS: Highly Significant at P < 0.01.

Table (4): Difference Between Mothers' Attitude at Posttest and Age, Education, Occupation and Socioeconomic Status

A	NOVA	Sum of Squares	df	Mean Square	F	Sig.
Age	Between Groups	.062	3	.021	1.051	.387
	Within Groups	.511	26	.020		
	Total	.573	29			
Education	Between Groups	.179	5	.036	2.185	.090
	Within Groups	.394	24	.016		
	Total	.573	29			
Occupation	Between Groups	.014	2	.007	.343	.713
	Within Groups	.559	27	.021		
	Total	.573	29			
SES	Between Groups	.002	2	.001	.057	.945
	Within Groups	.570	7	.021		
	Total	.573	29			

df=degree of freedom, F= fisher test, sig=significant, NS: Non Significant at P > 0.05, S: Significant at P < 0.05, HS: Highly Significant at P < 0.01,

The finding in table (4) regarding the difference between mother's attitude at posttest and their age, education, occupation and socioeconomic status indicated no significant statistical difference between mother's attitude at posttest and the age, education, occupation and socioeconomic stat

Discussion

Part (1) Discussion of the distribution of the mothers by their demographic characteristics

The findings in the table (1) indicated that the age of mothers who participate in the study between (23-29) years. This finding related small sample size and if the sample size is huge number may reflect result different from this finding and support the risk age for preterm labor is less than 17 and more than 35 years. In the study conducted in Palestine (Mothers' Knowledge of Health Caring for Premature Infants after Dis-charge from Neonatal Intensive Care Units in the Gaza Strip, Palestine) found that (46.7%) of mothers at age (20-30) years old. This result may be related to that most of Iraqi women married around the age of 18-30 years $^{(4)}$.

In the study conducted in Iraq, (Knowledge of Mothers regarding Premature Baby Care in Mosul city) found that the mean age of women was 26 years ⁽⁵⁾.

Regarding to the mother's level of education the finding of the previous study indicated that most of mothers graduated of secondary school. Moreover, the result of current study supported by study done in Iran found that (50%) of mothers graduated of secondary school ⁽⁴⁾. The finding is supported by other study in Iran (Evaluation of Parents' Awareness and Knowledge about Problems and Issues related to their Premature Infants in an Iranian Hospital) found that most of mother had level of education diploma and

high⁽⁶⁾. In the study conducted in found that 36% of their sample had post graduated ⁽⁵⁾.

The present study related shows that mothers occupation were housewives. This finding is related to most of women have secondary school education and absent chance of work in Iraq. In the study found that (74.2%) of mothers were housewives ⁽⁴⁾.

Regarding to the mother's resident the finding of the present study indicated that most of mothers were living urban areas as resident, while the mothers' type of delivery indicated that most of mothers had cesarean section delivery. This finding related to the most of women prefers the cesarean section (C/S) delivery because it is less pain than the normal vaginal delivery (NVD).

Related to the period of mother stay in the NICU with their premature baby the finding indicated that most of them stay days in the NICU, the definition of NICU the premature baby stay few hours, days and weeks. (7).

Most of the mothers in the present study their socio economic status the finding indicated that half of them had moderate level of socioeconomic status. This finding is related to most of Iraqi families come from moderate to poor socioeconomic status and absent of chance of work with the essentials human need for life. In the study conducted found that (56.7%) of mothers had low level of income ⁽⁴⁾.

Posttest) For Mothers attitude toward discharge care plan

According to the result of the present study the pretest and posttest mothers' attitude about discharge care plan of preterm baby, table (2), indicated that mothers had a negative attitude about care of preterm baby after discharge from the NICU at the period of pretest. While, the finding in the posttest revealed that mothers had positive attitude about care of preterm baby after discharge from the NICU. Also, there are highly significant difference between the mean score of mothers' attitude at the pretest and posttest.

The present study findings Table (2) shows that of the mean score of mothers attitude about discharge care plan in the pretest was (1.57) at negative level. While in the posttest the mean score of mothers attitude about discharge care plan was (2.78) at positive level. The change from the point view of the researcher—that an increase of mothers attitude related to increase their knowledge may enhance the mothers 'desire to learn some health matters that are concerned with caring for their newborn baby.

Part (3) Discussion of difference between mother's attitude at pretest and their age, education, occupation and socioeconomic status

The finding of present study table (3) revealed to the difference between mothers attitude at pretest and their age, education, occupation and socioeconomic status which shows there is no significant statistical

difference between mothers attitude at pretest and their demographic data like age, education, occupation and socioeconomic status.

Part (4) Discussion of difference between mother's attitude at posttest and their age, education, occupation and socioeconomic status

The finding in table (4) regarding the difference between mother's attitude at posttest and their age, education, occupation and socioeconomic status indicated significant statistical difference between mother's attitude at posttest and the age, education, occupation and socioeconomic status. In the study conducted in Palestine found that there were no significant associations between mother's sociodemographic characteristics and education of mothers about premature infants health care post-discharge from NICU and their knowledge about preterm care after discharge from NICU (P-values > 0.05) (4).

Conclusions

The program has effectiveness on the mothers' level of attitude toward discharge care plan during the 2 period of test; the study groups have negative level of attitude before implementation of an educational program and the level of attitude improve to positive level at posttest. There is a significant difference between the means of the mothers'

attitude before and after implementation of the program.

Recommendations

Implementation of the educational program in medical city complex in Baghdad city about discharge care plan and improve the attitude of mothers. Training session for the mothers about discharge care plan after admitted their baby in NICU and improves the knowledge and practice of mothers to care of their in preterm babies at home. Follow up and evaluation of mother's knowledge toward applied discharge care plan.

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