

Intervention Trial to Improve Breastfeeding Practice among Women in AL-Qassim, Buraidah

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Abstract: Estimating prevalence of breastfeeding cessation among mothers in reproductive age .and estimating knowledge attitude of mother toward breastfeeding .provide health education into intervention. Compare between control and interval sample. Randomized interventional trial (preintervention phase –interventional phase –postinterventional phase).The study was applied in Saudi Arabia, AL-Qassim, buraidah2011-2012 in MCH. A self –administrated questionnaire was used to collect data. More than 49.1% of participating women lay between age group (26-35). 75.4% of the sample was multi pares. Over than 70.2% are have normal delivery. About 4.44% has to stop breastfeeding in force of the father but it decrease to 2.22%..

Mothers believe that Breastfeeding and formula has the same benefits by mean score equal 4.62 in interventional group which slightly increase after the massage to 4.68. While the mean core for who said that the formula can't be as much as Breastfeeding benefits 4.82. And become 4.84 after the massage. 46,6% of the mothers didn't take the support and take help to learn how to breast feed her child but the percentage for asking help increase to 71.1% after the massage. Also mothers was plain to breast feed the next child by 22% which markedly change after the massage to rich 48%.

Mothers in both intervention and control group had satisfactory knowledge level considering breast feeding benefits for mothers and child, so shortage of knowledge was not the main cause for decrease breast feeding practice among them breastfeeding wasn't the first choice for the mothers during the first months due to many precipitating factors as example : it is painful, mothers taking drugs, baby was sick, father ask her to stop lactation , or she is worker mother and there is no nursery in the work place, but after the health education massage and discussion with mothers in intervention group the mothers attitude toward breast feeding practice was improved as they learned how to overcome these difficulties.

Most of the mother didn't take the support and learn how to breast feed her child from the doctor or nurse which may be the cause of some mothers decided to stop breast feeding without consultation.

1. INTRODUCTION

It is recommended in the holy Quran that the mother should breastfeed her child for 2 year. The medicines with the time scientifically clarify the importance of this fact.

Brest feeding is considered the ideal method of infant feeding for at least the first 6 months of life .it has protective effect which is essential for child health through it is rule in preventing the major causes of child mortality including GIT & Respiratory infection. Also, it is medically proved that is has normal contraception against pregnancy and prevent breast cancer for the mother.

Breast feeding by the mother to her new born infant is mandatory in the Holly Quran. ALLAH ordered the mother to breast feed her child for two full years because of the following:

1: Benefit to baby:

- Breast milk is the most complete form of nutrition for infants. A mother's milk has just the right amount of fat, sugar, water, and protein that is needed for a baby's growth and development. Most babies find it easier to digest breast milk than they do formula.

- As a result, breastfed infants grow exactly the way they should. They tend to gain less unnecessary weight and to be leaner.
- Breast milk has agents (called antibodies) in it to help protect infants from bacteria and viruses. Breast milk keeps babies healthier. Babies who are not breastfed are sick more often and have more doctor's visits. Studies show that babies who are not exclusively breastfed for six months are at greater risk for a range of infectious diseases, including ear infections, diarrhea, and respiratory illnesses, and have more hospitalizations.

2: Benefit to mother:

- Nursing uses up extra calories, making it easier to lose the pounds of pregnancy. It also helps the uterus to get back to its original size and lessens any bleeding a woman may have after giving birth.
- Breastfeeding, especially exclusive breastfeeding (no supplementing with formula), delays the return of normal ovulation and menstrual cycles. (However, parents should still talk with your doctor or nurse about birth control choices.)
- Breastfeeding lowers the risk of breast and ovarian cancers, and possibly the risk of hip fractures and osteoporosis after menopause.
- Breastfeeding makes a family's life easier. It saves time and money. Families do not have to purchase, measure, and mix formula. There are no bottles to warm in the middle of the night!

1*Mother – baby relationship:

- A mother can give her baby immediate satisfaction by providing her breast milk when her baby is hungry.
- Breastfeeding requires a mother to take some quiet relaxed time for herself and her baby.

This is what our religion tell us, and the science says the same let us see what science say and other studies discovered:

In most situations human breast milk is the best source of nourishment for human infants, (2) preventing diseases, promoting health and reducing health costs. (3) The World Health Organization (WHO) recommends breastfeeding for up to two years or beyond and exclusive breastfeeding for the first six months of life. Breastfeeding for the first six month of life “provides continuing protection against diarrhea and respiratory tract infection that is more common in babies fed formula.

2*Types of feeding:

Exclusive breastfeeding: is defined as nursing whenever the baby indicates a desire (day or night) during his first six months of life. The baby derives all of his nutrition from the breast and he receives no bottles or early solids. The baby stays near his mother so that he can nurse and pacify at the breast on his own schedule.

Continued breastfeeding: is defined as nursing beyond six months, whether or not other foods and liquids are added to complement breast milk. The baby still nurses and pacifies at the breast on his own schedule, but will usually indicate a desire for table foods.

Mixed breastfeeding: means that along with breast milk, a mother will provide supplemental foods or liquids before six months of age. Mothers who provide 100 percent of infant nutrition through pumped breast milk are also considered mixed breast feeders because suckling provides more nipple stimulation than pumping, leading to increased milk synthesis.

Formula feeding: means that a baby is fed with a bottle and receives only formula, ranging from cow's milk to specialty formulas.

Breast milk has various advantages, one of which is that it contains well-balanced nutrients, including fat, lactose and protein, which are the main ingredients. The proportions of these ingredients are automatically adjusted at different times to match the growth of baby. This makes breast milk the best food for your baby.

Breast milk components and their functions are:

Fat, lactose and protein, the main components of breast milk, have the characteristics below. Lactose is a source of energy and is contained the largest proportion (among fat, lactose and protein) in breast milk.

Fat is an important ingredient in the development of your baby's brain and in the maintenance of the body structure.

Protein is broken down into amino acids when it is absorbed into your baby's body, and becomes a source for building muscles. It also contains important immune proteins such as lactoferrin and IgA.

Other components have the functions explained below...

They reduce the risk of allergies developing

Breast milk has a substance that forms a protective coating on the intestinal wall, and promotes the development of the intestinal epidermis. Thus it prevents allergens from invading through the baby's intestines, which have numerous openings.

They help breast milk be easily digested and absorbed.

Breast milk contains enzymes such as lipase and amylase that help with digestion, so it is easily digested and absorbed by babies with fragile intestinal systems.

3*Improving breastfeeding practice among women can be achieved by limit the risk factors including : Maternal age ,mother education level ,number of children ,mother social support network ,work commitment ,father education and type of delivery . There was previous study about Breastfeeding knowledge and attitude among Saudi women in Central Saudi Arabia reveale that the 848 participating women, 54,2-55,8% preferred breastfeeding and 61,1-71,8% of women were not breastfeeding.

Statement of the problem:

Estimate Knowledge and measure prevalence of breastfeeding practice.

Objectives:

1. Estimating knowledge, attitude and intention of practice of mothers toward breastfeeding
2. Provide health education into intervention group.
3. Compare knowledge, attitude and intention of practice of mothers between control and intervention group.

2. METHODOLOGY

The study was applied in Saudi Arabia, AL-Qassim, buraidah2011-2012 in MCH. a self –administrated questionnaire was used to collect data .

Previously prepared health education material.

Study design:

Randomized interventional trial (pre intervention phase –interventional phase –post interventional phase)

Sample:

Subject: women at child baring (18 – 45) years.

Site: Saudi Arabia, al-qassim, buraydah

Sampling: total is (114) randomized 57 control, 57 intervention

Quality control:

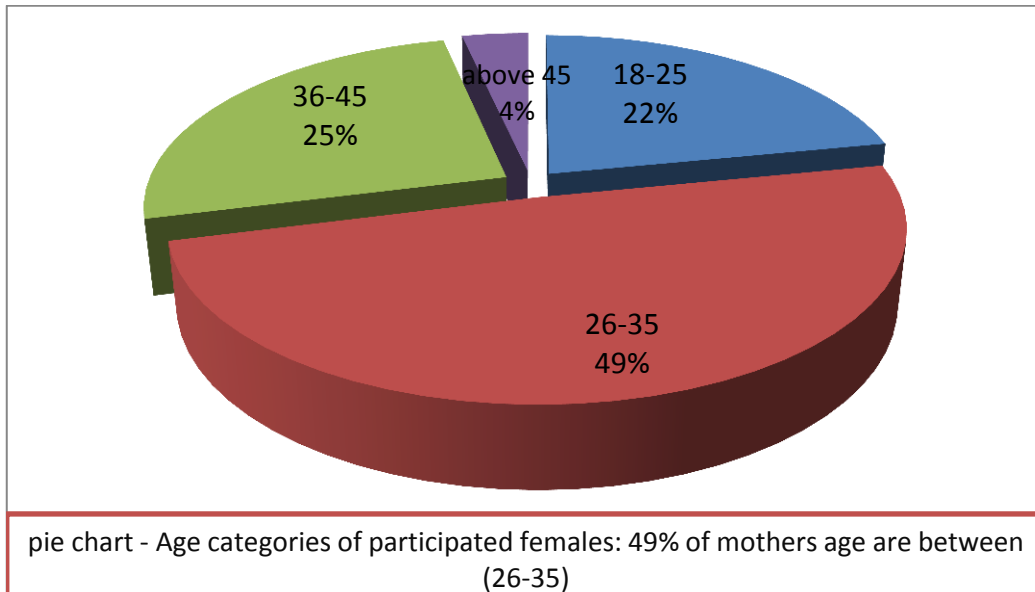
Checking of completing questionnaires, it's accuracy and clarity .

Statistical analysis:

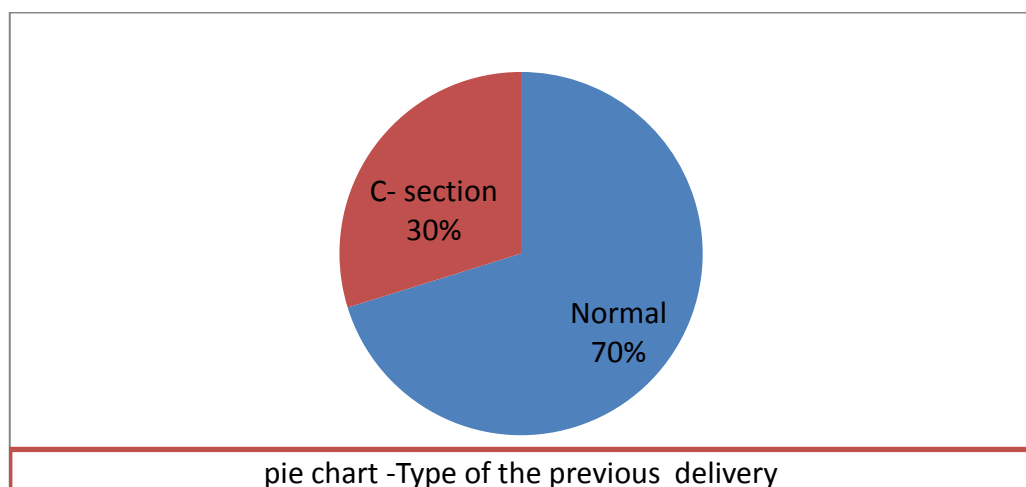
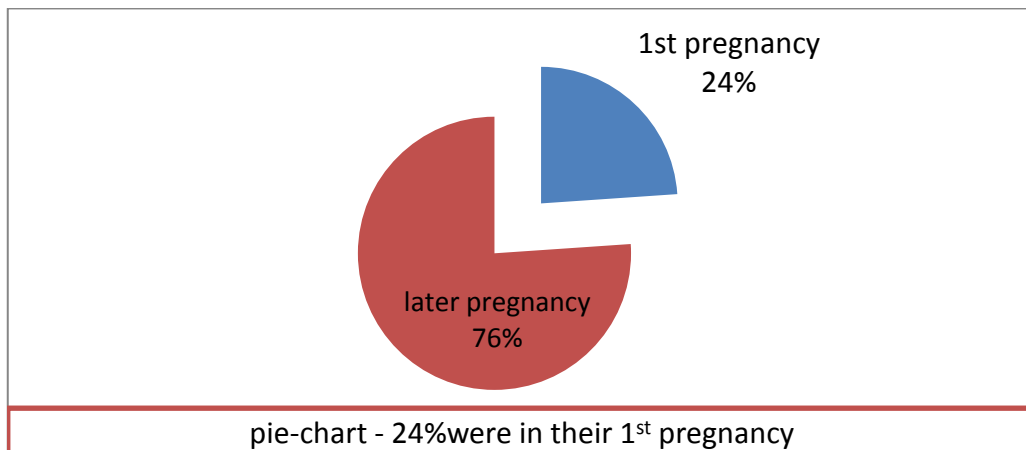
Data collected was be coded and entered into computer the statistical package for social science (SPSS) software is suggested to be utilized for data capture and statistical analysis .

Ethical review:

Obtaining an informed consent before the start from the responsible authorities. The objectives of the study will be explained to the women with stressing on the importance of the data and its confidentiality anonymous questionnaire.



3. RESULTS



Characteristic of sample:

More than 49.1% of participating women lay between age group (26-35). 75.4% of the sample were multiparis . Over than 70.2% are have normal delivery.

What are the reason for not breastfeed your baby in future ?					
		intervention		control	
		yes	no	yes	no
Breast milk not sufficient alone	pre	15.55%	84.44%	17.39%	82.60%
	post	13.33%	86.66%	23.18%	76.81%
Breastfeed is painful	pre	6.66%	93.33%	15.94%	84.05%
	post	4.44%	95.55%	14.49%	85.50%
Mother is busy	pre	2.22%	97.77%	14.49%	85.05%
	post	11.11%	88.88%	18.84%	81.15%
Father not encourage breast feeding	pre	4.44%	95.55%	5.79%	94.20%
	post	2.22%	97.77%	5.79%	94.20%

Factor affect breastfeeding:

Mothers faces many difficulties and constrain during breastfeeding initiation most of that constrains linked to malpractice of breastfeeding due to lack of skills as example mothers complain of small amount of expressed milk which could be improved by increase frequency of breastfeeding and certain diet., and others related to decrease husband support toward mothers breast feeding practice which lead to decrease frequency of breastfeeding times per-day and start mixed then complete as exclusive bottle feeding.

Intention to practice		intervention			control		
How do you plan to feed your child		Breastfeed	artificial	Mixed	Breastfeed	artificial	Mixed
	pre	22%	6.6%	68.8%	28.9%	8.6%	55%
	post	48%	2.2%	46.6%	44.9%	7.2%	42%

Intention to practice of breast feeding among intervention and control group:

1- in interventional group, the mothers who planed to breast feed their babies before the message about 22% and after the message about 48% ,but who planed to feed their babies by the artificial way before the message about 6.6% and after the message about 2.2% , but who decide feeding their babies by mixed way was before the message 68.8%and after the message 46.6% .while in control group regarding the breast feeding at the first time 28.9% ,but at the second time 44.9% and about the artificial feeding at the first time about 8.6%,but at the second time 7.2% and about the mixed feeding at the first time 55% ,but at the second time 42%.

Attitude		intervention		control	
Start feeding		At hospital	At home	At hospital	At home
	pre	73.3%	20%	88%	31.4%
	post	79.1%	20%	72.4%	21.7%

Intention to practice: where will you start breast fed your child:

- In measurement of mothers in interventional group about their knowledge that the breast feeding is better than formula for growing of baby about 4.82% before receiving the message & 4.84% after receiving the message.
- While in control group decrease from 4.77% to 4.71%. Most of the mothers in interventional group stars feed their babies at the hospital about 73.3% and it is increase after receiving the message about 79.1%, but the least feed at home about 20%.
- While most of the mothers in control group stars feed their babies at hospital about 88% at first time and at the second time was 72.4% but the least were at home by 31.7% at the second time.

Ask of help from care providers		intervention		control	
Ask of help from care providers		Yes	No	Yes	No
	pre	46.6%	48.8%	60.8%	39.1%
	post	71.1%	33.3%	60.8%	37.6%

Intention to practice would you ask help for breast feeding the women in interventional group who agree about ask of help from care providers before the message about 46.6% and after the message about 71.1% while in control group the women who agree about ask of help from care providers in both times 60.8%.

Evaluation of female Knowledge:

	Mean score - intervention		Mean score - control	
Breast feeding benefit is equal to artificial feeding	Pre:	4.62	Pre:	4.75
	Post:	4.68	Post:	4.75
Breast feeding decrease child respiratory infection	Pre:	4.11	Pre:	4.04
	Post:	4.33	Post:	4.63
Breast feeding benefit mother health	Pre:	4.82	Pre:	4.77
	Post:	4.48	Post:	4.71
Breast feeding is better than formula for growth of child	Pre:	4.82	Pre:	4.77
	Post:	4.84	Post:	4.71

- Mean score of knowledge all above 3.5 which indicate high level of knowledge in both intervention and control group both pre and after intervention

4. DISCUSSION

The sample:

In relations to our study which is improve breastfeeding practice among women in AL-Qassim by educational intervention (2012), our sample depend on married women in AL-QASSIM of KSA. The precipitation was include 114 married female who ,are age arranged from 18-45 y .We found most of them Between age 26-35 y(49.1%). Among of 115 women who experienced delivery, their is (70.2%) had normal labor .Finally, they divided after receiving the educational massage into tow group:

- 1) Women does not prefer breast feed (9.7%),
- 2) Women prefers breast feeding (94.4).

Factor affects breastfeeding...

1. The women in interventional group who stop breast feeding because they are think that breast milk not sufficient about 15.55% before the message and decrease to 13.33% after message while the control group at the first time about 17.39% ,but at the second time about 23.18 %
2. The women in interventional group who think breast feeding is painful about 6.66% before the message and 4.44% after while the control group at the first time about 15.49% but decrease to 14.94%.
3. Most of the worker's mothers in interventional group decide to stop breast feeding about 2.22% before the message, but 11.1% after the message while in control group at the first time about 14.49%, but at the second time about 18.84%.
4. The women in interventional group who said that the father not encourage breast feeding about 4.44% before the message and 2.22% after the message while in control group in both times was the same which is 5.79%

Evaluation of female Knowledge:

the women in the inferential group who believed that "the breast feeding benefits equal to the artificial milk about 4.62 before the massage and 4.68after the massage ,while in the control group was the same which was 4.75.

After providing the massage in the interventional group, some of changed their knowledge about the effect of breast feeding on decrease chance of respiratory infection from 4.11 to 4.33, while in the control changed from 4.04 to 4.63

effect of massage did not showing any improvement about their knowledge in the "benefits of breast feeding on mother`s health" as the result shows in interventional group changed from 4, 82 to 4,48 ,while in control group decreased from 4.77to 4.71

5. CONCLUSION

mothers in both intervention and control group had satisfactory knowledge level considering breast feeding benefits for mothers and child, so shortage of knowledge was not the main cause for decrease breast feeding practice among them breastfeeding wasn't the first choice for the mothers during the first months due to many precipitating factors as example: it is painful, mothers taking drugs, baby was sick, father ask her to stop lactation, or she is worker mother and there is no nursery in the work place, but after the health education massage and discussion with mothers in intervention group the mothers attitude toward breast feeding practice was improved as they learned how to overcome these difficulties.

Most of the mother didn't take the support and learn how to breast feed her child from the doctor or nurse which may be the cause of some mothers decided to stop breast feeding without consultation

RECOMMENDATION

1. Hospital most implied nutritional specialist to meet the mothers after labour for education and give them important information about breast feeding and how to do it.
2. Follow up for breast feeding during the visit for vaccination.
3. more cooperation between health ministry and media ministry to achieve high level of awareness (Tv programs, commercials, volunteer work).
4. Cooperation between health ministry and education ministry to enriched the curriculum about breast feeding and their advantages.
5. Provide nursing unit in any female working department.

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