

THE EFFECT OF TRAINING MOVIES ON EXCLUSIVE BREASTFEEDING

Fariba Khayyati¹, Majid Mansouri²

ABSTRACT

Objectives: There have been a lot of studies about the interventions affecting breastfeeding, but the efficacy of training and educational movies has not yet been proved. This survey compares the efficacy of training movies versus common method of face-to-face training in health care centers.

Methodology: This was a single blind randomized controlled trial. Participants were selected and allocated randomly. In addition to the routine face to face trainings presented by health workers, the intervention group members got a training movie including important breastfeeding points and the way of doing that. The participants were evaluated by blinded investigator at sixth birth month.

Results: From all samples, 118 mothers (50.2%) were doing exclusive breastfeeding; 7(3%) didn't practice breastfeeding and 202 mothers (85.9%) at least had the experience of 6 months of breastfeeding. There wasn't any difference in exclusive breastfeeding among these two groups ($p>0.05$). Two hundred twenty five participants (95.7%) did overnight breastfeeding and there was not any significant statistical difference in two groups ($p>0.05$).

Conclusion: This survey's findings and the conclusion of mentioned facts demonstrate that using training movies alone can not help to increase exclusive breastfeeding and decrease its problems; however face to face training can be very effective and training movies shouldn't replace live and direct counselling.

KEY WORDS: Breastfeeding, Influencing factors, Exclusive breastfeeding, Health training.

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1. Fariba Khayyati, MS,
Kurdistan University of Medical Sciences,
Sanandaj, Iran
 2. Majid Mansouri, MD,
Assistant Professor,
Kurdistan University of Medical Sciences,
Besat Hospital, Sanandaj, Iran

Correspondence:

Majid Mansouri,
Besat Hospital,
Keshavarz Ave,
Sanandaj, Iran
E-Mail: magidmansoori@yahoo.com

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INTRODUCTION

Long-lasting breastfeeding has some advantages for both mother and infant health and its benefits are recorded in a comprehensive scientific literature.¹ The American Academy of Paediatrics recommended that for the early six months of life infants just take exclusive breastfeeding, and this process should be continued at least up to one year and also from the 6th month complementary foods would be added.² The goal of Department of Health and Human Services' Healthy People 2010 initiative is to encourage 75% of mothers to start

breastfeeding directly postpartum, and to have 50% of mothers to breastfeed 6 months after childbirth, and to keep 25% of them up to at least one year.³

However, the results of observational studies imply that if clinicians prepare support for breastfeeding problems and try to encourage breastfeeding during every routine preventive visit in office setting, there would be an increase in the rate of exclusive breastfeeding.⁴ Nonetheless, there isn't any randomized trial for checking the efficacy of interventions delivered by current primary health care services.⁵

Applying training and educational movies is one of the health training methods and it is going to be very popular in Iran. Concerning the importance of breastfeeding, there has been a lot of studies about the interventions affecting breastfeeding, but the efficacy of training and educational movies has not yet been proved. This survey compares the efficacy of training movies versus common method of face-to-face training in health care centers.

METHODOLOGY

This was a single blind randomized controlled trial. Considering α of 5%, power of 80%, and difference of 25%, the sample size of 122 people in each group was intended. From each northern, southern, eastern, western and central part of the city two random health centers were selected. Using pregnancy registration list, 13 random third trimester pregnant women were selected in each center, and with random allocation they were placed in one of intervention or control group. In addition to the routine face to face trainings presented by health workers, the intervention group members got a training movie including important breastfeeding points and the way of doing that. The research procedure was acknowledged by research moral committee of Kurdistan University of medical sciences and informed consent was taken from participants.

The training movie was prepared with the assistance of experienced nurses and according to standards of breastfeeding training for mothers in Iran. The contents of movie

included: the importance of exclusive breastfeeding, the technique of breastfeeding, probable problems in breastfeeding, and complementary nutrition of infants. Watching the movie for at least three times was the criterion. The participants were evaluated by blinded investigator at sixth birth month. The investigator were not aware of the topic of our research and only the data that we wanted had been gathered from them. Information about exclusive breastfeeding (not using other nutritive foods) and other data had been gathered from interviews and was analysed by SPSS 16 software. Comparisons were performed by using the student's *t*-test for continuous variables and the χ^2 test or Fisher's exact test for categorical variables, with a significance level of 0.05.

RESULTS

Participants of this study were 244 women from whom 235 continued up to the end of the study (110 participants in intervention group and 125 in control group). The mean age was 27.33 years. Among them, 122 women (50%) were nulliparous. 227 women (93%) were housekeepers, one participant (0.4%) was smoker, and 89 (36.5%) had good family support. There was no significant relationship between mentioned factors and studies' groups (Table-I). The mean birth weight was 3248 grams (± 484). According to the follow up, 118 women (50.2%) had natural delivery, and 117 women (49.8%) experienced section (caesarean). From all infants, 63 (26.8%) used pacifiers and glassier nipples. Members of the intervention group, as an average, watched the movie 3.2 times from the last month of pregnancy up to 6th month after childbirth. After 6 months of follow up, from all samples, 118 mothers (50.2%) were doing exclusive breastfeeding; seven (3%) didn't practice breastfeeding at all; 26 (11.1%) breastfed their infants from one to five months and 202 mothers (85.9%) at least had the experience of 6 months of breastfeeding. There wasn't any difference in exclusive breastfeeding among these two groups ($p > 0.05$). Two hundred twenty five

Table-I: Participant's characteristics in two groups

<i>Characteristic</i>	<i>Control</i>	<i>Investigation</i>	<i>P_Value</i>
Age (Mean±SD)	27.5(±5.8)	27.2(±5)	NS
<i>Rank of Birth</i>			
First	52(47.3)	70(52.2)	NS
Second	40(36.4)	47(35.1)	
>Third	18(16.4)	17(12.7)	
<i>Employment</i>			
Not Employed	104 (94.5)	123(91.8)	NS
Employed	6(5.5)	11(8.2)	
<i>Smoking</i>			
Yes	0(0)	1(7)	NS
No	110(100)	133(99.3)	
<i>Family Support</i>			
Yes	43(39.1)	46(34.3)	NS
No	67(60.9)	88(65.7)	

NS: Not Significant

participants (95.7%) did overnight breastfeeding and there was no statistical significant difference in two groups ($p>0.05$) (Table-II).

DISCUSSION

A lot is being written about the advantages of exclusive breastfeeding for newborns health⁶. Whenever there is exclusive breastfeeding, longer breastfeeding duration is a strong probability and can be expected to a great extent.⁷

In our study 50.2% of cases practiced exclusive breastfeeding and 86.6% had the experience of at least six months of breast feeding. Comparing with the other countries, the percentage of exclusive breastfeeding in Sweden⁸ was 55%, in Denmark 52% and in Italy 35%.^{9,10} This is corresponding with the instruction of "Department of Health and Human Service' Healthy People 2010 Initiative".³ Several factors, including awareness of breastfeeding instructions and having family support, can affect breastfeeding; so training and support should be prepared for this purpose.¹¹

According to the results, 51.2% of infants involved in intervention group and 49.1% in control group had taken the advantage of

exclusive breastfeeding and there was no significant statistical difference. This study proves that training and educational movies don't have significant impact on exclusive and overnight breastfeeding. Therefore, according to the results, preparing training movies solely can not be effective and helpful unless these movies are used for training health workers and they transfer the acquired information to mothers, but we should bear in mind that all of participants have been trained by health workers previously and may be because of this the movie couldn't give them additional information about breastfeeding and it was a limitation in our study.

Nonetheless, in a study about African American breastfeeding mothers it has been proved that training movies and counsellors' support can motivate and prolong breastfeeding duration.¹² According to expert's attitudes, face to face training is the most effective method of training; so spending time and money in this filed is more helpful. Hence in a study in Ghana, exclusive breastfeeding is being increased through counselling before and after childbirth.¹³ There are some breastfeeding training classes, in Iran, for pregnant women and face to face training continues after childbirth.

Table-II: Comparison of two groups after intervention

<i>Characteristic</i>	<i>Control</i>	<i>Investigation</i>	<i>P-Value</i>
Newborn weight (Mean±SD)	3309.2(±481.4)	3194.2(±482.3)	NS
<i>Exclusive Breastfeeding</i>			
Yes	54(49.1)	64(51.2)	NS
No	56(50.9)	61(48.8)	
<i>Delivery</i>			
NVD	51(46.4)	67(53.6)	NS
Caesarian	59(53.6)	58(46.4)	
<i>Brest Problem</i>			
Yes	6(5.5)	6(4.5)	NS
No	104 (94.5)	128(95.5)	
<i>Mother disease</i>			
Yes	2(1.8)	0(0)	NS
No	108(98.2)	125(100)	
<i>Infant Disease</i>			
Yes	1(0.9)	6(4.8)	NS
No	109(99.1)	119(95.2)	
<i>Overnight Breastfeeding</i>			
Yes	106(96.4)	119(95.2)	NS
No	4(3.6)	6(4.8)	
<i>Pacifiers and glassier nipples</i>			
Yes	27(24.5)	36(28.8)	
No	83(75.5)	89(71.2)	

NS: Not Significant

In Labarere et al study,⁷ in the fourth week of childbirth, 83.9% of mothers who had been supported by trained physicians and 71.9% of control group members were practicing exclusive breastfeeding; in our study this survey was completed in the sixth month Short training courses for physicians, according to these findings, can improve breastfeeding habits.

In Iran, trained health care workers advise mothers about breastfeeding. As it has been said in Guise study, for initiation and short-term duration of breastfeeding, education alone is not as effective as a combination of education and support together.¹⁴ Adding written texts to trainings is not a good method to improve the effects of training and this may decrease the effectiveness. Such results motivate researchers for further studies about intervention, and comparing the combination of support and training with support or training alone.¹⁴ In Italy,¹⁵ some factors like breastfeeding of mothers themselves in their childhood, breastfeeding guides delivered at the early childbirth and high social position were positively affecting initia-

tion of breastfeeding. For those who had their first experience of childbearing, in Toronto Canada,¹⁶ supports given by other mothers were surveyed and it had been proved that there were some positive impacts on breastfeeding duration.

In Napoli,¹⁷ Italy, in an interventional study it was shown that training and support prepared by husband for their wives and also face to face training of husbands about prevention and managing of breastfeeding problems, were affective in motivating mothers for breastfeeding. The number of full breastfeeding in the first 6 months was 25% in intervention group and 15% in control group. In addition, the study demonstrated that face to face training of husbands was correlated with full breastfeeding in the first 6 months of childbirth and fathers had significant role in supporting successful breastfeeding.

In order to prevent confounder effects, apart from common routine trainings, there was no other intervention along with training movies. Perhaps watching training movies in conjunc-

tion with perseverance of mothers is more effective. Although in another study,¹⁶ advices given by peer mothers (other trained women who were successful in breastfeeding) through phone calls didn't cause any significant statistical difference in duration and initiation of exclusive breastfeeding in both intervention and control groups. In contrast with written material^{18,19} which is not effective, education and peer counselling can enhance initiation and longer duration of breastfeeding. As such, this survey's findings demonstrates that using training movies alone can not help to increase exclusive breastfeeding and decrease its problems; however face to face training can be very effective and training movies shouldn't replace live and direct counselling.

REFERENCES

1. Fewtrell MS, Morgan JB, Duggan C, Gunnlaugsson G, Hibberd PL, Lucas A, et al. Optimal duration of exclusive breastfeeding: what is the evidence to support current recommendations? *Am J Clin Nutr* 2007;85(2):635-8.
2. American Academy of Pediatrics: Work Group on Breastfeeding. Breastfeeding and the Use of Human Milk. *Pediatrics* 1997;100(6):1035-9.
3. US Department of Health and Human Services. Developing Objectives for Healthy People 2010. Washington, DC: US Department of Health and Human Services, Office of Disease Prevention and Health Promotion; 1997.
4. Taveras EM, Li R, Grummer-Strawn L, Richardson M, Marshall R, Rêgo VH, et al. Opinions and practices of clinicians associated with continuation of exclusive breastfeeding. *Pediatrics* 2004;113(4):283-90.
5. Taveras EM, Capra AM, Braveman PA, Jensvold NG, Escobar GJ, Lieu TA. Clinician support and psychosocial risk factors associated with breastfeeding discontinuation. *Pediatrics* 2003;112(1):108-15.
6. Bhandari N, Bahl R, Mazumdar S, Martines J, Black RE, Bhan MK. Infant Feeding Study Group. Effect of community-based promotion of exclusive breastfeeding on diarrhoeal illness and growth: A cluster randomised controlled trial. *Lancet* 2003;361(9367):1418-23.
7. Labarere J, Gelbert-Baudino N, Ayral AS, Duc C, Berchotteau M, Bouchon N, et al. Efficacy of breastfeeding support provided by trained clinicians during an early, routine, preventive visit: a prospective, randomized, open trial of 226 mother-infant pairs. *Pediatrics* 2005;115(2):139-46.
8. Zetterström R. Breastfeeding and infant-mother interaction. *Acta Paediatr Suppl* 1999;88(430):1-6.
9. Michaelsen KF, Larsen PS, Thomsen BL, Samuelson G. The Copenhagen cohort study on infant nutrition and growth: duration of breastfeeding and influencing factors. *Acta Paediatr* 1994;83(6):565-71.
10. Quintero Romero S, Bernal R, Barbiero C, Passamonte R, Cattaneo A. A rapid ethnographic study of breastfeeding in the North and South of Italy. *Int Breastfeed J* 2006;1:14.
11. Cattaneo A, Yngve A, Koletzko B, Guzman LR. Promotion of Breastfeeding in Europe project. Protection, promotion and support of breast-feeding in Europe, current situation. *Public Health Nutr* 2005;8(1):39-46.
12. Gross SM, Caulfield LE, Bentley ME, Bronner Y, Kessler L, Jensen J, et al. Counseling and motivational videotapes increase duration of breast-feeding in African-American WIC participants who initiate breast-feeding. *J Am Diet Assoc* 1998;98(2):143-8.
13. Aidam BA, Pérez-Escamilla R, Lartey A. Lactation counseling increases exclusive breast-feeding rates in Ghana. *J Nutr* 2005;135(7):1691-5.
14. Guise JM, Palda V, Westhoff C, Chan BK, Helfand M, Lieu TA. U.S. Preventive Services Task Force. The effectiveness of primary care-based interventions to promote breastfeeding: systematic evidence review and meta-analysis for the US Preventive Services Task Force. *Ann Fam Med* 2003;1(2):70-8.
15. Riva E, Banderali G, Agostoni C, Silano M, Radaelli G, Giovannini M. Factors associated with initiation and duration of breastfeeding in Italy. *Acta Paediatr* 1999;88(4):411-5.
16. Dennis CL, Hodnett E, Gallop R, Chalmers B. The effect of peer support on breast-feeding duration among primiparous women: A randomized controlled trial. *CMAJ* 2002;166(1):21-8.
17. Pisacane A, Continisio GI, Aldinucci M, D'Amora S, Continisio P. A controlled trial of the father's role in breastfeeding promotion. *Pediatrics* 2005;116(4):494-8.
18. Sikorski J, Renfrew MJ, Pindoria S, Wade A. Support for breastfeeding mothers: A systematic review. *Paediatr Perinat Epidemiol* 2003;17(4):407-17.
19. Fairbank L, O'Meara S, Renfrew MJ, Woolridge M, Sowden AJ, Lister-Sharp D. A systematic review to evaluate the effectiveness of interventions to promote the initiation of breastfeeding. *Health Tech Assess* 2000;4(25):1-171.