## The Timing and Predictors of the Early Discontinuation of Breastfeeding in Southwest Iran

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Despite widespread knowledge about breastfeeding benefits for mothers and neonates, duration of breastfeeding is decreasing in most countries. However, lack of knowledge regarding breastfeeding and problems of lactation play a minor role in the discontinuation of breastfeeding in populations around the world that practice prolonged breastfeeding<sup>[1]</sup>.

Some studies have suggested that 95% of pregnant women hope to breastfeed. Breastfeeding as it were, has therefore become a major initiative in maternal-child health in the 21st century<sup>[2]</sup>. Knowledge of when and why women discontinue breastfeeding is crucial to guide interventions aimed at increasing both the initiation and duration of breastfeeding.

In Iran, the exclusive breastfeeding rates up to 6 months were 44% in 2007<sup>[3]</sup>. Most interventions, intended to increase the rates of both the initiation and continuation, have focused on increasing knowledge regarding breastfeeding or the management of problems of lactation.

The purpose of this study was to identify the rate, timing and predictors of the early breastfeeding discontinuation for women gave birth to a child in Bushehr and referred to university clinics for follow up.

During a 5 years period, at Bent-ol-Hoda hospital (affiliated to Bushehr University of Medical Sciences) we interviewed mothers who delivered a healthy-term, singleton infant. Oral consent to participate in the study was obtained.

Baseline data was collected using a semistructured questionnaire within the first 24 hours after delivery. Each neonate was followed for 6 months (weekly in first month and monthly from 2-6 months). Complete termination of breast-feeding during first 2 weeks and first 2 months was considered very early and early discontinuation of breastfeeding, respectively. Information on 393 mothers was reviewed prospectively. Of these, 359 (91.4%) initiated breastfeeding during first 24 hours.

Of 393 mothers, 215 (54.7%) were much, very much and moderate confident in continuing breastfeeding until the child becomes 2 months old.

Of 361 breastfeeding mothers, 213 (59%) breastfed exclusively for 1-30 days, 129 (35.7%) for 31-90 days, 15 (4.2%) for 91-150 days and only 3 for 180 days. The median duration of exclusive breast feeding (EBF) was 15 days. Nobody received prenatal or postnatal breastfeeding consultation. Totally, 389 (99%) started formula anytime during first 6 months. The median duration of BF and starting formula was at 90 days.

Mostly (38.8%) stated reason for starting formula during first 6 months was the feeling of mother about milk inadequacy. None of mothers received consultation when starting formula. Over a 6 month period, 40.9% (155) and 79.8% (302) of mothers had stopped breastfeeding by 2 months and 4 months, respectively.

Of 81 mothers, only 5 committed to relactation and 4 of them were successful.

The final outcome of breastfeeding was as follows: 96.4 % (379) quitted and 3.6% (14) continued breastfeeding during 6 months after birth.

Only cesarean section and low confidence about continuing breastfeeding until 2 months were significantly associated with discontinuing breastfeeding both at 2 weeks and 2 months.

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After adjusting for age and parity, two independent predictors of discontinuation of breastfeeding at 2 weeks were the mother's low confidence about continuing breastfeeding (OR=2.96, 95% CI=1.37-6.4) and cesarean delivery (OR=4.99, 95% CI=1.9-13.02) and for those discontinuing at 2 months were high level of mothers education (>12 class) (OR=2.12, 95% CI=1.24-3.62) and low confidence about continuing breastfeeding until 2 months (OR=2.76, 95% CI=1.76-4.34).

Similar to ours, in another study in Iran, exclusive breast-feeding rate in the first five days of life was 82%, but it declined to 44% at the first month<sup>[4]</sup>.

It seems that government's recommendations and efforts are effective and important in initiation of breastfeeding but, these cannot insure its duration.

According to Bushehr Health sector's data, all hospitals achieved more than 90 percent of the ten strategies of baby-friendly hospitals around the province<sup>[5]</sup>. But mothers are discharged usually 14-48 hours after delivery from hospital, and it is the time when breastfeeding has not been fixed.

Mothers implied to problems experienced during breastfeeding but, breastfeeding consultation clinics to be referred for obviating nursing problems were not available. So, if they being neglected and not properly managed, mothers will initiate formula and discontinue EBF.

It seems that mother's low confidence to breastfeed, cesarean delivery and >12 class educational level had a negative effect on duration of breastfeeding. It is necessary to activate breastfeeding consultation clinics and follow the mothers closely during their nursing periods. Also addressing more comprehensive and operational educational program since midpregnancy may help to increase the rate. We recommend future interventional studies in order to extract the best ways for increasing continuation of breastfeeding and improving this behavior in the population.

*Key words:* Breastfeeding; Early Discontinuation; Risk Factor

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