

## Interventions of Health Visitors in Making a Decision About Breastfeeding

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### Abstract

**Aim:** The aim of this paper was to establish a link between the promotion of breastfeeding and the interventions of the visiting nurse.

**Methods:** The study was conducted in 2012 in the city of Đakovo and the surrounding area. The questionnaire was filled out by mothers after leaving the maternity ward, during the first visit of the community health nurse within the first seven days after the labor.

**Results:** From a total of 154 parturient women who filled in a survey after they had left the hospital, the decision about breastfeeding before the pregnancy was made by 58.4% of examinees. Primiparas from the city were older than primiparas from the surrounding rural area ( $p < 0.001$ ). Mothers received the majority of information about the proper placement of the child on the chest after birth from nurses in the maternity hospital (56.3% of the examinees). The study showed that 57.9% of the examinees had the support of their husband during lactation. The visiting nurses' first visit was within seven days after delivery at the home of 121 (78.6%) examinees, showing good awareness and collaboration between secondary and primary health care.

**Conclusion:** This research has confirmed that breastfeeding promotion and nursing interventions have a major impact on breastfeeding.

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### Introduction

Preparing a pregnant woman and family members to accept positive attitudes about

breastfeeding begins with educating and sensitizing the local community. Breastfeeding is good for the family, and society as a whole. The World Health Organization (WHO) and UNICEF are focused on the application of natural

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nutrition to ensure the health of the child and mother (1). There is a need for intervention by gynecologists, maternity clinics, pediatricians, patrons, family physicians, nurses working in ambulances and pharmacists. Breastfeeding should be a choice, not a behavior that is imposed on the mother (2). It implies feeding the baby on the mother's chest, because breast milk is the best baby food for newborns (3). The length of breastfeeding is an indicator of the interest, time and energy that a mother intends to invest in her child's development. Rooming-in is a 24-hour stay of the mother and the baby with the goal of starting breastfeeding as early as possible. During breastfeeding, a mother transfers to her child feelings of warmth, safety and protection (4). Research has shown that early skin contact, besides stimulating breastfeeding, also affects the rhythm of sleep and sleepiness, and stimulates the motor and neurological behaviors of newborns after delivery. These positive effects were also observed in premature babies and term children (5). Mothers who breastfeed for a longer time spend more time with their child and achieve the interaction that favors their child's cognitive and intellectual development (6). According to the estimation of the health nurse, at least one or several patron intervention visits are arranged for the protection and care of the pregnant woman. During child monitoring, the mother should be instructed that she should be available to the child for unlimited breastfeeding (7). This process creates the proper bonding of mother and child and affects a different pattern of the mother's behavior. It is a special psychophysical stimulus for a mother and a child that improves the cognitive development of the child. Mother's milk, with its composition, fully meets the needs of the baby for food and fluids during the first six months of the baby's life, and as a dairy meal can be delivered even after the first year. The effects of the optimal composition of the mother's milk and the influence of certain ingredients stimulate the development of the baby's brain, and are not produced by other milk types. Establishing the importance of breastfeeding encourages an environment in which the mother has the support of family members, and the promotion of breastfeeding is

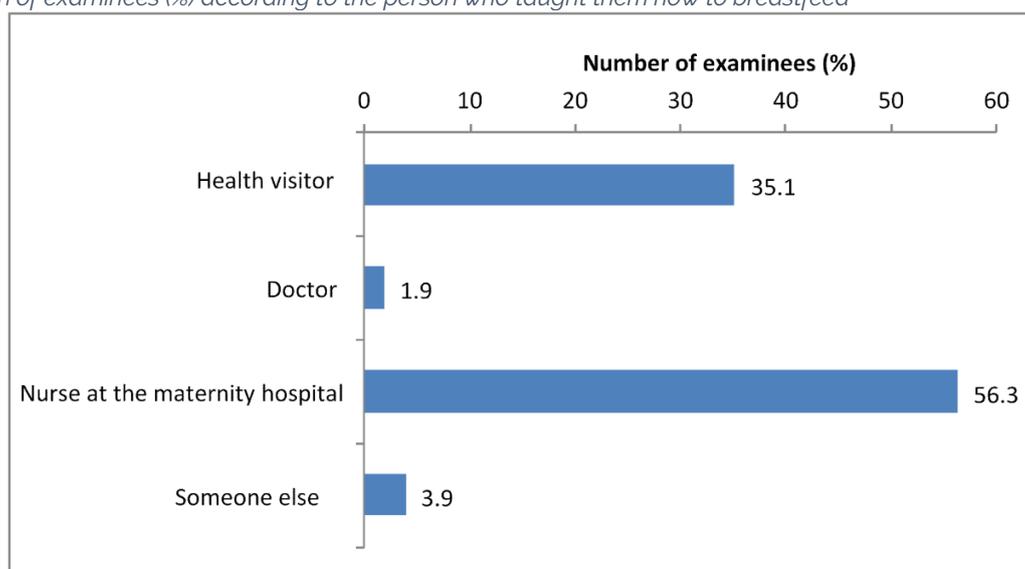
carried out by health care professionals. The most important supportive role to the mother in breastfeeding belongs to the father of the child, who must be familiar with the benefits of breastfeeding and have a positive attitude towards it (8). The aim of this study was to establish a link between the promotion of breastfeeding and the interventions of visiting nurses.

## Materials and methods

The research was conducted in the town of Đakovo and its surroundings, during the first house call made by health visitors after the mother had been discharged from the hospital. From a total of 202 babies born during the survey, there were 154 mothers who were breastfeeding their babies and were included in the research. The research was carried out by means of an anonymous survey. Other issues addressed concern the relationship between breastfeeding and the way of birth in these pregnancies, the duration of pregnancy, education on breastfeeding and support during breastfeeding. Afterwards, questions were asked related to previous births and the length of breastfeeding of children.

### *Statistical analysis*

The frequency distributions for investigated variables were described by descriptive statistical methods. The Kolmogorov-Smirnov test was used to analyze the normal distribution of the variables. The mean values for the continuous variables have been expressed as the arithmetic mean and as the standard deviation for normally distributed variables, and for variables that do not have a normal distribution, as median and range. The nominal data have been expressed through the frequency distribution both in groups and its content.  $\chi^2$ -test and Fisher exact test have been used to determine the differences between the two independent samples. The significance level  $\alpha = 0.05$  was selected to evaluate the importance of the obtained results.

**Figure 1.** Division of examinees (%) according to the person who taught them how to breastfeed**Table 1.** Breastfeeding signs regarding the time when the decision on breastfeeding was decided

Breastfeeding signs	Time when the decision was made				Total N (%)	p*
	Before the pregnancy N (%)	During the pregnancy N (%)	After the delivery N (%)	Does not want to breast-feed N (%)		
BMI before pregnancy	21.68	3.18	1.20	24.42	5.58	
Mouth wide open, round cheeks, baby is close to the mother's body, baby is calm and relaxed, the baby holds the breast with its fingers by itself and lets go of the breast by itself after it has been fed	64 (71.1)	37 (72.5)	3 (27.3)	2 (100)	104 (67.5)	
Baby's mouth is not wide open, cheeks are sunken, breasts are painful and sore, there is only some contact between the mother and the baby	14 (15.6)	7 (13.7)	3 (27.3)	-	24 (15.6)	0.001
Baby's mouth is not wide open, cheeks are sunken, breasts are painful and sore – there are rhagades, there is no contact between the mother and the baby	3 (3.3)	3 (5.9)	-	-	6 (3.9)	
The mother is tense and in an awkward position, the baby is restless and cries, the baby can't take the breast by itself, breastfeeding is painful and short	-	2 (3.9)	1 (9.1)	-	3 (1.9)	
The baby does not suckle	9 (10)	2 (3.9)	4 (36.4)	-	17 (11)	
Total	90 (100)	51 (100)	11 (100)	2 (100)	154 (100)	

## Results

There were 154 women who took part in the research, of which 79 (51.3%) live in rural areas, and 75 (48.7%) in the city. The median age in which mothers had their first baby is 26 for the women living in town, and 23 for those living in rural areas (Mann Whitney U test,  $p < 0.001$ ). Mothers who live in the town have breastfed their first baby longer, whereas mothers who live in rural areas have breastfed their second baby longer. Most of the examinees received the information on breastfeeding from the nurses in the maternity hospital and from the health visitor (Figure 1).

During breastfeeding, 88 (57.9%) of the examinees were supported by their husbands, 56 (36.8%) by their extended family and 8 (5.3%) and by other services (i.e. health care service, BSG - Breastfeeding Support Group). Evaluation of examinees' breastfeeding has shown much better results in the cases of those who made the decision to breastfeed before or during their pregnancy. The lowest incidence of breastfeeding is in the group of examinees who made the decision to breastfeed after delivery (Table 1).

It was found that a group of women who gave birth to one, two and three children statistically differ significantly in the number of months of breastfeeding ( $F(2,133) = 12.14$ ,  $p < 0.01$ ,  $\eta^2 = 0.154$ ). In a post-hoc comparison (Bonferroni), a statistically significant difference was found between women who had a first child ( $M = 1.66$ ,  $sd = 4.37$ ) and women who had a second child ( $M = 7.34$ ,  $sd = 8.87$ ).

In order to determine whether there was a difference between women who had a second or third child, a t-test was carried out. It was found that a group of women who gave birth to two and three children statistically differ significantly in the number of months breastfeeding another child ( $t = 6.45$ ,  $df = 65$ ,  $p < 0.01$ ). There was a statistically significant difference between women who had a second child ( $M = 1.02$ ,  $sd = 0.15$ ) and women who had a third child ( $M = 6.25$ ,  $sd = 5.34$ ).

## Discussion

By educating pregnant women and family members, the adoption of breastfeeding as the only way to properly feed the baby is accomplished. Interventions of visiting nurses are conducted through individual and group work (g). Mothers are more likely to make a decision about breastfeeding if they are well informed about the benefits of breastfeeding and if they have family, social, and especially their husbands' support. While 57.9% of examinees had the support of the husband during breastfeeding, only 5.3% had the support of outside groups, suggesting that breastfeeding support groups should be expanded because the mother is the best educator. Studies have shown that a woman whose husband does not support breastfeeding stops earlier or doesn't even start breastfeeding (8). The first visit of the nurses within 7 days after the birth occurred in 78.6% of the cases, indicating good communication and cooperation between the hospital and the patrons' service. It is very important for a mother to know where and how she can get all the information needed after birth. The visiting nurse must be familiar with the physiology of lactation to promptly detect potential problems with breastfeeding and to arrange, together with the new mothers, a health care and intervention plan for solving any identified problems. A significantly better estimation of breastfeeding was observed among those who decided to breastfeed before pregnancy (Table 1). Mothers with a clear plan for the duration of breastfeeding usually follow through with it, while hesitant mothers generally breastfeed for a shorter amount of time (10). Mother and child should master the breastfeeding technique, and the mother should be instructed to inflate the baby, which means that the frequency and length of breastfeeding depend on the child's needs and signs. Signs that breastfeeding is progressing or not progressing depend on the emplacement of mothers, breastfeeding and signs of the transfer of the milk (11). Our research has shown that previous experience is an important factor because the respondents' second child nursed longer than the third child.

Respondents of the study have consistently demonstrated that women who gave birth to more than one child have a higher breastfeeding efficacy than women who gave birth to one child (12, 13, 14). A positive experience of breastfeeding can improve the mother's confidence in breastfeeding, and a negative experience of breastfeeding can reduce it. Other studies have shown that 30-57% of mothers have problems with breastfeeding in the early postpartum age, where insufficient milk is reported as the most common problem and the primary cause of early termination of breastfeeding (15, 16). A well-educated mother is more prepared for problems that may occur during lactation, and she has a different pattern of behavior. Studies have shown that the mother who spends more time with her child is aware of the benefits of her milk for the growth and development of the baby, and also that in a short period of time the child developed a good grip on the breasts (17,18) (Table 1). Children have both the need for food as well as the need for touch, gentleness and love that only the mother can provide in the first days of life. Pinard's aphorism says "There is no replacement for mother's milk and her heart" (19). WHO, UNICEF and the American Pediatric Academy (AAP) plead for breastfeeding only up to 6 months of age and then a continuation of breastfeeding along with the right meal for frozen foods for at least one year (20) or two years (21), and even longer if so wanted by both mother and child.

## Conclusion

This research has shown that the most important breastfeeding factors are the mother's decision before delivery and an early visit by a nurse after coming home from the maternity ward. The visiting nurse is the first health care worker to start training pregnant women during pregnancy about breastfeeding and continues after the mother's return from the maternity ward. Also, the visiting nurse's approach to the mother and newborn is of great importance, and their imparted knowledge is the basis for the development of appropriate skills (22) and attitudes so that habits and behavior changes will be adopted in order to preserve and improve

the health of pregnant women, new mothers and children in the wider community.

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