



Breastfeeding Knowledge and Practice in the Canton Sarajevo

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ABSTRACT

Mother's milk is ideal for infants, it is safe and contains all the necessary nutrients, antibodies that protect the baby from common children illnesses. Exclusively breastfeeding of infants and continuing the breastfeeding until the second year of life provides the child with quality nutrition and can prevent the lack of nutrients, malnutrition and their consequences. We can see the need for education on breastfeeding and promotion of breastfeeding, which gives importance to healthcare workers for education and prevention of early stopping of breastfeeding. The study included 100 respondents in the Canton, 50 primiparae (pregnant women expecting the first child) and 50 respondents who were multiparas. The study was designed as an observation – transient study and lasted from April to July 2016. It was done using a CDC questionnaire. The research was conducted in the Public Health Institute for the Health Protection of Women and Maternity of Sarajevo Canton at Vogosca. There is a statistically significant difference in the knowledge of primipara and multiparas about the length of breastfeeding according to WHO recommendations, $\chi^2=13,827$; $p=0.001$. Multipare have better knowledge. The most frequent sources of information about breastfeeding in both examined groups were the experiences of other mothers, $\chi^2=0.186$; $p=0.666$. After the research we have found that there is a certain number of subjects who do not have enough breastfeeding education. The fact that the majority of respondents considered the most reliable source of information on breastfeeding the experience of other mothers and family members emphasized the need to create new promotional projects on the importance of breastfeeding by health professionals.

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INTRODUCTION

The practice of breastfeeding is in correlation with good health conditions for children, with a primary effect of reducing the incidence and severity of the most prevalent diseases in childhood, as well as infant mortality (1-2). Breastfeeding has demonstrated positive effects on intelligence quotient, school performance, and income in adulthood, which translates into advantages for families and society (3-4). The WHO and the American Academy of Pediatrics (AAP) recommend “exclusive breastfeeding for about 6 months, followed by continued breast-feeding as complementary foods are introduced, with continuation of breastfeeding for 1 year or longer as mutually desired by mother and infant” (5). Breastfeeding is one of the few positive health behaviors that is more prevalent in poor than in rich countries; and within low- and middle-income-countries themselves, poor women breastfeed longer than rich women (6). However, these practices are vulnerable to external influences, such as the breastmilk substitutes industry, which is always searching for ways to expand its reach and penetrate new markets (7). This means that protecting breastfeeding from commercial influences should be a priority, particularly in the world's poorest places (6). Although number of deaths of women-mothers in childbirth is minimal, besides carrying out hospital certification in hospitals that are baby friends (baby friendly hospitals),

which improves the conditions for mothers and newborns, only half (51.5%) of newborn babies are breastfed within one hour after birth, while a large number of newborns in the Federation of Bosnia and Herzegovina (FBiH) start breastfeeding only a day after birth (87.3 %) (8). As infants grow, their nutrient needs grow with them. After the first six months of life, an infant's nutrient demands start to exceed what breastmilk alone can provide (9). To keep up with growing demands, WHO recommends that infants begin eating solid, semisolid or soft foods at 6 months of age to ensure that their nutrient intake is sufficient to fuel their developing brains and bodies (10). These solids foods should be safe, nutritious and ideally provided in addition to breastmilk from 6 to 23 months of age (11). The aim of this research is to establish a level of knowledge about the importance of breastfeeding among women in Sarajevo Canton and to compare the knowledge and experience of women who have been breastfeeding and with women who are in the first pregnancy.

EXAMINEES AND METHODS

Examinees and study design

A total of 100 examinees were divided into two equal groups: primiparae (n=50) and multiparas (n=50). The criteria for inclusion in the survey were that they had one childbirth for a group of primiparae and multiple births for the multipar group.

The research was conducted in the Public Health Institute for the Health Protection of Women and Maternity of Sarajevo Canton at Vogosca site and in the Health Center Vogosca in the Family Medicine Service. Respondents were selected by random selection and voluntarily agreed to participate in this research. The research was designed as an observational study and lasted from April to July 2016. The research was performed in accordance with Helsinki Declaration. The personal data of the respondents were not used during the research. The ethical aspect of the research has not been violated. The data from this research will serve as guidelines for educating pregnant women about the importance of breastfeeding.

Methods

The research is based on CDC questionnaire, which contains questions related to the knowledge, attitude and practice of breastfeeding, as well as questions intended for primiparae or multiparas. The questionnaire contains twenty six MCQ (multiple choice questions), to which will evaluate knowledge of breastfeeding. The questionnaire used for this research has been modified (abbreviated) for the need of research, allowed to be used and completely anonymous.

Statistical analysis

Before statistical analysis, normal distributions and homogeneity of the variances were tested using Kolmogorov-Smirnov test respectively. Groups were compared using chi square test. Data were expressed as numbers and percentage. $P < 0.05$ was considered significant.

RESULTS OF RESEARCH

The highest number of subjects from the primiparae group were from age groups 18-25 ($n=27$; 54%), followed by 26-32 years ($n=16$; 32%). In the multiparas group, the majority of subjects belonged to the age group of 32-40 years ($n=20$; 40%), then the age group 26-32 years ($n=15$; 30%), $\chi^2 = 21,026$; $p = 0.001$. The highest number of subjects in the primiparae group had a higher education ($n=25$; 50%), followed by a secondary education ($n=24$; 48%). In the multiparas group, the highest number of examinees were with secondary education ($n=26$; 52%), followed by higher education ($n=21$; 42%). From the multiparas group 22 (44%) woman first breastfed in the birth room while 28 (56%) had it in their hospital room (table 1). 44 (88%) multipara reported that they breastfed or are breast-feeding, while 6 (12%)

answered that they did not due to difficulty in establishing lactation and exhaustion after cesarean section. Visits to the patronage nurse after delivery had 48 (96%) multiparas, and 2 (4%) did not.

There is a statistically significant difference in the knowledge of primipara and multiparas about the length of breastfeeding according to WHO recommendations, $\chi^2=13,827$; $p=0.001$. Multiparae have better knowledge. 32 (64%) multiparas have given a correct answer that the recommended period is one year, while in the group of primiparas the correct answer gave 22 (44%). There is a statistically significant difference in the knowledge of primipara and multiparas about time of introduction of complementary foods, $\chi^2=2.449$; $p=0.047$. Highest number of primiparae ($n=21$) think that best time of introduction of complementary foods for a child is with 6-12 months of age, same answer give 18 (36%) multiparas (table 2).

The largest number of respondents in both examined groups responded that they were satisfied with the advice they received from the patronage nurse regarding breastfeeding, (primiparae 64%, and 44% of multiparas). That they were partially satisfied answered 20% ($n=10$) of the primiparae group and 40% ($n=20$) of the multiparas group. 16% ($n=8$) of primiparae said they were not satisfied and the same percentage of multiparas. Using the chi square test, a statistically significant difference in the obtained responses was not found in relation to the groups tested, $\chi^2=1.782$; $p=0.182$. In the group of multiparas, 34% ($n=17$) of the respondents were satisfied with the advice given regarding breastfeeding in the hospital after delivery, 48% ($n=24$) are partially satisfied and 18% ($n=9$) are not satisfied. By using the chi square test, no statistically significant difference was found on the main sources of breastfeeding information compared to the test group, $\chi^2=0.032$; $p=0.859$. The most frequent sources of information about breastfeeding in both examined groups were the experiences of other mothers, then family members and pregnant women's courses. There is no statistically significant difference in the opinion of the examinees of the most reliable breast feeding groups, $\chi^2=0.186$; $p=0.666$. The majority of respondents in both groups surveyed believe that the most reliable source of information about breastfeeding is the experience of other mothers.

Table 1. Age of respondents and level of education.

		Groups		χ^2	p
		Primiparae	Multiparas		
Age	18-25 years	27 (54,0%)	9 (18,0%)	21.026	0.001
	26-32 years	16 (32,0%)	15 (30,0%)		
	32-40 years	7 (14,0%)	20 (40,0%)		
	>40 years	0 (0,0%)	6 (12,0%)		
Secondary educations		24 (48,0%)	26 (52,0%)	0.372	0.542
Higher educations		1 (2,0%)	3 (6,0%)		
Faculty education		25 (50,0%)	21 (42,0%)		

Table 2. Knowledge about breastfeeding and the use of complementary foods.

		Groups		χ^2	p
		Primiparae	Multiparas		
Knowledge of the duration of breastfeeding according to WHO recommendations	Three months	10 (20,0%)	0 (0,0%)	13,827	0.001
	Six months	15 (30,0%)	10 (20,0%)		
	One year	22 (28,0%)	32 (64,0%)		
	More than one year	3 (6,0%)	8 (16,0%)		
Time of introduction of complementary foods	Below 3 months of age	10 (20,0%)	6 (12,0%)	2.449	0.047
	With 3 months of age	10 (20,0%)	15 (30,0%)		
	Between 4-6 months of age	9 (18,0%)	11 (22,0%)		
	Between 6-12 months of age	21 (42,0%)	18 (36,0%)		

Table 3. The source of information and help on breastfeeding.

		Groups		χ^2	p
		Primipare	Multiparas		
Satisfaction with breastfeeding advice received from a patronage nurse	Satisfied	32 (64,0%)	22 (44,0%)	1.782	0.182
	Partially satisfied	10 (20,0%)	20 (40,0%)		
	Not satisfied	8 (16,0%)	8 (16,0%)		
The main source of information on breastfeeding	Family members	15 (30,0%)	12 (24,0%)	0.032	0.859
	Experiences of other mothers	15 (30,0%)	20 (40,0%)		
	Nursing nurs	5 (10,0%)	4 (8,0%)		
	Pediatrician	2 (4,0%)	0 (0,0%)		
	Courses	10 (20,0%)	10 (20,0%)		
	Books	3 (6,0%)	4 (8,0%)		
The most reliable sources of information on breastfeeding	Family members	15 (30,0%)	13 (26,0%)	0.186	0.666
	Experiences of other mothers	15 (30,0%)	20 (40,0%)		
	Nursing nurs	10 (20,0%)	8 (16,0%)		
	Courses	8 (16,0%)	9 (18,0%)		
	Books	2 (4,0%)	0 (0,0%)		

The second most reliable source of information about breastfeeding is family members, for both groups examined. As the third most reliable source of the respondents, patronage nurses and pregnancy courses were indicated (table 3).

The highest percentage of examinees of both groups examined considered that breastfeeding was important for the health and proper development of the child, and no statistically significant difference was found in relation to the groups tested, $\chi^2 = 0.039$; $p = 0.844$. This attitude is 80% ($n=40$) of the primiparae and 72% ($n=36$) of multiparas.

DISCUSSION:

Knowledge on the importance of breastfeeding among the female population in Canton Sarajevo is on an enviable level based on the results obtained by this research. However, there are significant differences between multipar and primiparous in relation to knowledge about the importance of breastfeeding. Multiparae had statistically significantly better knowledge of the duration of breastfeeding according to WHO recommendations in relation to primiparae $\chi^2=13,827$; $p=0.001$. 32 (64%) multiparas have given a correct answer that the recommended period is one year, while in the group of primipers the correct answer gave 22 (44%). Research in India has shown that the majority of the mothers agreed that colostrums is first breast milk (96.7%) and is important to maintain the immunity of the baby (99.2%). While, 85.2% felt that exclusive breast milk to be given during first 6 months, only 68% stated that breastfeeding should be continued up to 2 years (12). Highest number of primiparae ($n=21$) think that best time of introduction of complementary foods for a child is with 6-12 months of age, same answer give 18 (36%) multiparas, $\chi^2=2.449$; $p=0.047$. By comparing the knowledge, attitude, and practice of breastfeeding the primiparae and the respondents who have given birth before, we can see a somewhat greater knowledge of the multiparas in comparison to the primiparae. Breastfeeding is a cost-effective way of feeding infants and young children, available everywhere, accessible to everyone and does not burden the home budget, significantly improves mental development and learning success in children, equates all children of the world, giving every child the same and the best start in life, and it is the unique right of women and society should promote equality and empowerment of women and support them in breastfeeding in every way (13).

The American Association of Pregnant women cites many benefits of attending pregnancy courses, such as: education by experts, communication and sharing experiences with other pregnant women, psychological and physical preparation for pregnancy and childbirth, partner learning on the importance and support of pregnant women and maternity (14). The most frequent sources of information about breastfeeding in both examined groups were the experiences of other mothers, then family members and pregnant women's courses. After the research we found that there is a certain number of subjects who do not have enough breastfeeding education. The fact that the largest number of respondents, in both surveyed groups, believe in the first place that the most reliable source of information about breastfeeding is the experience of other mothers and family members emphasizes the need to create new promotional projects on the importance of breastfeeding by health professionals.

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