THE LENGTH OF BREASTFEEDING: THE ROLE OF PRENATAL EDUCATION AND LISTENING TO CLASSICAL MUSIC

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ABSTRACT

Introduction: The use of music in midwifery is a new research field and further studies and clear evidence are needed to make it a valuable element of midwifery care. The aim of the study was to prove the influence of education of pregnant women and listening to classical music on the frequency and length of breastfeeding at discharge from the maternity hospital and 6 weeks after delivery.

Subjects and methods: A prospective randomized controlled study was conducted in 2019. The sample consisted of pregnant women from the area of Hercegbosna County, 198 of them (N=198).

Results: No significant difference was found in the frequency of exclusive breastfeeding and feeding with supplementation between the experimental and control groups at discharge (88.9% vs 92.2%). A significantly larger number of subjects in the experimental group were exclusively breastfed compared to the control group after 6 weeks (χ^2=4.541; df=1; p-0.033). Conclusion: The results indicate that investments in the development of the competencies of pregnant women and the creation of conditions in maternity hospitals can significantly affect the duration of exclusive breastfeeding.

Keywords: midwifery education, music therapy, exclusive breastfeeding, puerperium

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INTRODUCTION

Protection, promotion and support of breastfeeding are public health priorities worldwide (1). Breastfeeding promotion has a strong influence on the initiation and length of breastfeeding (2). During the period from 1930 to 1960, a decrease in the frequency of breastfeeding was observed, and such a tendency was especially pronounced in the USA (The United States of America), where a drop from 80% to 20% of breastfed children discharged from maternity hospitals was recorded (3). According to a UNICEF (United Nations Children′s Fund) report published in 2018, global breastfeeding rates vary from 35% in the Middle East and North Africa to 65% in Southern Africa. Only two out of five infants were exclusively breastfed in the first 6 months of life (4). A globally organized action to return to breastfeeding was initiated by the World Health Organization (WHO) and UNICEF (5). The perception of breastfeeding in public is often not stimulating for mothers who want to breastfeed their children, so the discomfort of breastfeeding in public is one of the reasons for avoiding breastfeeding or planning a shorter duration of breastfeeding (6). Research results in the Republic of Croatia show that as many as 50% of mothers give up breastfeeding after the first month of their child's life, and only 13.4% of children are exclusively breastfed (3). Data on breastfeeding practices in Bosnia and Herzegovina are generally unsatisfying. Only 51.5% of newborns were breastfed for the first time within one hour after birth, while 87.3% of newborns started breastfeeding within one day after birth. A total of 15.1% of children under 6 months of age are exclusively breastfed. With the development of the "Baby Friendly Hospital" accreditation standard by the Federal Agency for Quality and Safety in Healthcare and their application in maternity hospitals, the frequency of exclusive breastfeeding in the Federation of Bosnia and Herzegovina has increased (7, 8). The results of a meta-analysis from 2018 (Mahesh et al.) proved that exclusive breastfeeding is more significant in groups that undergo education, also a lower risk of introducing formula supplementation compared to groups that did not undergo any education. Fathers who are educated provide significant support to their partners during breastfeeding compared to fathers without education (9). A systematic review from 2016 on the topic of breastfeeding education in the period from 1980 to 2015 concluded that health professionals play a key role in educating and informing pregnant women about breastfeeding, and that the education of doctors and midwives

who participate in the education of women should be an obligation of the health system (10).The majority of midwives express a need for a different approach to breastfeeding mothers in which, in addition to technical support, they would have time build a relationship of trust and be more focused on the mother and the child (11). The results of a research conducted by Palac et al. among breastfeeding mothers in the area of the city of Mostar indicate that a small percentage of breastfeeding mothers find support from doctors and nurses/midwives. There is no continuous training of healthcare professionals on breastfeeding (those who provide these services), and the results of the lack of education on breastfeeding are also evident. They found that significantly more breastfeeding mothers have a higher education than non-breastfeeding mothers. The difference in the practice of breastfeeding between employed and unemployed women has not been proven, and women who gave birth by caesarean section also breastfed less. The authors conclude that quality preparation and education before childbirth with support after childbirth would greatly contribute to increasing the prevalence of breastfeeding (12).A research review published from 1883 to 2014 on the topic of group or individual breastfeeding education does not offer evidence of which type of education is more effective, primarily due to methodological differences and the lack of high-quality studies (13). According to Karaçam, parents in Turkey also experience difficulties with breastfeeding. Of the 6,736 respondents, 24.5% of them believed that there was not enough milk, and damaged and painful nipples were a big problem (14). Breastfeeding rates are also low in Greece, but according to research on primiparous women (N=203) divided into the test and control group (the test group had 4 hours of midwifery education on breastfeeding) proved the effectiveness of education on the length of exclusive breastfeeding (15). In a study on a sample of 522 women with a lower socioeconomic status after randomization, the experimental group was exposed to educational video content about breastfeeding through the third trimester of pregnancy. There was no statistically significant difference between the experimental and control groups when starting the first breastfeeding, nor in the rate of exclusive breastfeeding. It was concluded that women with lower socioeconomic status need to invest more effort and start education earlier (16).

Despite the majority's positive attitude towards the benefits of courses for pregnant women and the often present fear of childbirth, only 20% of pregnant women in

Croatian maternity hospitals decide to attend them (17, 18).

The interaction of music and the psyche has been a phenomenon since ancient times and has been used for healing purposes ever since (19). Although from a historical perspective, science and music represent two completely separate entities, the digital revolution changes that relationship by uniting biology, science and music (20). The potential of music to influence the levels of dopamine, serotonin and oxytocin can lead to positive emotional reactions that are directly related to the strengthening of the psychological status (21). It is to be expected that an emotionally stable breastfeeding mother will have stronger capacities for overcoming difficulties related to breastfeeding and parenting, and will breastfeed longer. The therapeutic effects of listening to music on the health of mother and child have been proven in numerous studies (22, 23). A lower incidence of anxiety and depression in women, a lower perception of pain during childbirth and a higher oxygen saturation in the newborn child were found. Mothers report a better emotional connection with their children, a calming effect and longer breastfeeding. A unique package with selected music is not defined, but the selection is left to the creativity and knowledge of health professionals (22).

A research in Bosnia and Herzegovina on the influence of midwifery education and listening to classical music on the experience of labor pain and psychological health in puerperium found significant differences in measures of psychological health and labor pain between the experimental group (exposed to education and listening to music) and the control group, and points to the conclusion that the combination of music and health sciences represents an open research area, which, by connecting art and the midwifery profession, creates an alternative to the current standard midwifery care (24).

In order for music to be imposed as a valuable element of midwifery care, further research and clear evidence are necessary, and then the introduction of related content into teaching programs. This is confirmed by research from Turkey, in which highly educated midwives (N=142; bachelor's degree 51.2% and master's degree 18.2%) mostly support new forms of midwifery care and consider them important as a form of support for a woman giving birth, but also in puerperium. However, 15.0% of them have never heard of music therapy, 47.1% know the concept of music therapy, while only 16.5% think they have enough information, and it is devastating that no midwives used this method in care (25).

The aim of this research was to prove the influence of education of pregnant women and listening to classical music on the frequency of breastfeeding at the discharge of the mother and 6 weeks after discharge.

SUBJECTS AND METHODS

Structure and description of the study

A prospective randomized controlled study was conducted in: County Hospital "Dr fra Mihovil Sučić" Livno, Women's Dispensary of Livno Health Center and Private Gynecology Practice Vrdoljak in Livno, Bosnia and Herzegovina. The time of the research was from January 1, 2019 to October 1, 2019. The research was registered in the clinical trial registry ClinicalTrials.gov under the number NCT04104009.

Participants

The sample consisted of 198 respondents (N=198), pregnant women from the area of Herceg-Bosnia County. Type of sample: random, pregnant women in the second and third trimesters of pregnancy who gave birth in the maternity ward of the "Dr fra Mihovil Sučić" County Hospital in Livno in the period from mid-February 2019 to mid-August 2019. By randomization, the respondents were divided into: an experimental group in which group education and listening to classical music was carried out, and a control group that spent the pregnancy without education and listening to classical music. After the end of the training program with the experimental group, there was a break of 5 weeks, during which a new experimental and control group was formed. The procedure was carried out until the expected sample size was met (99 subjects per group).

The inclusion criteria in the research were: all pregnant women from the area of Herceg-Bosnia County who had their pregnancy checked in the competent Health Centers and private gynecology practice.

Exclusion criteria from the research were: minor pregnant women, pregnant women in the first trimester of pregnancy, pregnant women after the 34th week of pregnancy, multiple pregnancies, pregnant women with a history of cesarean section, pregnant women with a psychiatric diagnosis, high-risk pregnancies, incompletely and/or illegibly filled out questionnaires, pregnant women who did not listen to classical music in the agreed way, childbirth with a stillborn child.

Materials and questionnaire

Discharge letter of the newborn - data on the feeding pattern of the newborn on discharge from the maternity hospital were used.

A self-structured questionnaire about the infant's diet

The questionnaire was constructed for research purposes. It contains questions about the method of feeding the infant after 6 weeks, support during breastfeeding, the length of breastfeeding of the previous child, the reason for possible interruption of breastfeeding and the influence on the attitude towards breastfeeding.

The main input data were: age, place of residence, employment status, number of previous births, number of live births, number of spontaneous / intentional abortions, marital status, breastfeeding status in previous pregnancies, educational status, education in previous pregnancies, complications in the current pregnancy and mode of delivery.

Main outcome measures: infant feeding pattern at discharge and infant feeding pattern 6 weeks after discharge.

Intervention

After the randomization procedure, group education of pregnant women was carried out through four meetings. The education program included: psychophysical preparation for childbirth and motherhood, application of listening to classical music that continued until the end of pregnancy every day (in the evening hours before bedtime, for 15 minutes), and teaching and application of techniques for successful breastfeeding. At the end of the program, the educator arranged a weekly check-up by phone with the test subjects (for the sake of communication quality) with the aim of informing them about compliance with the agreed upon listening to classical music. Any (non) compliance was reported in a record specifically intended for the needs of the research. Pregnant women who did not fulfill the agreed plan were excluded from the research. The respondents agreed to send a self-structured questionnaire about the infant's diet to the given email addresses after 6 weeks of discharge from the maternity hospital. All vagueness are further clarified in special emails or by exchanging messages via the free messaging applications Viber Messenger/WhatsApp Messenger. Each respondent who did not respond to the questionnaire within a week was asked again via email. The waiting time for a response has been extended from one to two weeks. If no answer was received even then, the respondents were excluded from the research.

Statistical data processing

Data were collected in an MS Excel database (version 11. Microsoft Corporation, Redmond, WA, USA), and SPSS 20.0 statistical program (IBM Corp.,

Armonk, NY, USA) was used for statistical analysis. Data were processed using descriptive statistics methods, categorical variables were presented as frequency and percentage, while continuous variables were presented as arithmetic mean and standard deviation. Chi-square test was used to analyze differences between categorical variables, while t-test for independent samples was used to analyze differences between continuous variables. The association between risk factors was examined by Pearson's correlation coefficient. A probability level of $p < 0.05$ was taken as statistically significant.

Research ethics approval

The research was reported to the competent Ethics Commissions of the County Hospital "Dr Fra Mihovil Sučić" Livno (the Ethics Commission is shared by the County Hospital "Dr Fra Mihovil Sučić", The Livno Health Center and the Institute of Public Health of Hereceg - Bosnian County) and the Faculty of Health Studies in Mostar.

RESULTS

The Sample

The final sample included in the data analysis consisted of 175 respondents (N=175). Of these, there were 85 subjects of the experimental group (48.6%) who underwent group education and listened to classical music until the end of pregnancy, and subjects of the control group who had usual care, a total of 90 of them (51.4%), average age 31,1 year (min=20; max=47; SD=5.262). No significant difference in age was found between the subjects of the control group (M=30.9; SD=5.374) and the experimental group (M=31.4; SD=5.160), (t=-0.627; df=173; p=0.531). No significant differences were found in the number of examined women from the control and experimental groups who live in the city or in the village (χ^2=0.455; df=1; p=0.500). Most of the respondents were married (94.9 %), while in the total sample there were 6 (3.4 %) unmarried and 3 (1.7 %) divorced pregnant women. No significant differences were found in the number of married women in the control and experimental groups, nor in the distribution of respondents in the groups with regard to work status (χ^2=1.996; df=1; p=0.158). There was no significant difference in terms of educational status between the observed groups. The largest number of respondents in both groups were primiparous women (N=66; M=28.92; SD=5.124) and they were significantly younger than the other respondents (F=9.312; df=4; p<0.001). The lowest percentage of mothers in both groups had four live births. The largest percentage of mothers who exclusively breastfeed have completed high school, while the largest

percentage of mothers who breastfeed with formula supplementation have completed a university degree. In the group of mothers who do not breastfeed, not a single mother has completed a university degree, nor has she completed only elementary school.

The majority of mothers in all three groupswith regard to breastfeeding were employed.Most of the mothers in all three groups were primiparous women. The majority of women in the exclusively breastfeeding or non-breastfeeding groups gave birth vaginally, while the majority of women in the supplemental breastfeeding group gave birth by caesarean section.

Statistically significant differences weren't found between the control and experimental group in the number of respondents who used formula supplementation or exclusively breastfed in the earlier pregnancies (χ^2=1.11; df=2; p=0.574). In those cases, a significant percentage of the childbearing mothers that didn't brestfed were primiparas.Of the 70 respondents who reported not breastfeeding, 66 were primiparas, while four respondents from the experimental group (multiparas) didn't breastfeed in earlier pregnancies. A statistically significant difference wasn't found between the control and experimental group in the number of respondents regarding breastfeeding length in earlier pregnancies (χ^2=8.087; df=4; p=0.088) (Table 1).

Table 1. *Number of live births of mothers who (do not) breastfeed their children or breastfeed them with formula supplementation*

	exclusive breastfeeding		breastfeeding with formula supplementation		do not breastfeed at all	
	N	%	N	%	N	%
0	45	31,3	19	73.1	2	40.0
1	43	29,9	4	15.4	1	20.0
2	40	27,8	3	11.5	1	20.0
3	12	8,3				
4	4	2,8			1	20.0

Frequency of exclusive breastfeeding

There was no statistically significant difference in the frequency of exclusive breastfeeding and feeding with supplementation in the control and experimental group during the release from the hospital. In both groups, a higher percentage of respondents exclusively breastfeed while leaving the hospital (Table 2).

Table 2. *The frequency of exclusive breastfeeding and breastfeeding with supplementation in the control and experimental group during the release from the hospital*

	control		experimental		χ^2	df	P
	N	%	N	%			
exlusive	80	88.9	79	92.9	0.13	1	0.705
supplement	7	7.8	5	5.9			
no breastfeeding	3	3.3	1	1.2			

There were statistically significant differences in the frequency of exclusive breastfeeding and feeding with supplementation in the control and experimental group six weeks after giving birth. A statistically higher number of respondents in the experimental group breastfed exclusively, while a higher number of respondents in the control group breastfed and used supplements compared with the experimental group (Table 3).

Table 3. *The frequency of exclusive breastfeeding and breastfeeding with supplementation in the control and experimental group, six weeks after giving birth*

	control		experimental		χ^2	df	P
	N	%	N	%			
exclusive	67	74.4	77	90.6	4.541	1	0.033*
supplement	19	21.1	7	8.2			
no breastfeeding	4	4.5	1	1.2			

The reason for breastfeeding termination

There wasn't a statistically significant difference between the control and experimental group regarding their most frequent support person for breastfeeding (χ^2=8.217; df=5; p=0.147).

A statistically higher number of respondents in the experimental group exclusively breastfed their babies (χ^2=7.816; p=0.005), while a statistically higher number of respondents in the control group reported the reason for breastfeeding termination was the lack of milk (χ^2=10.212; p=0.001). Because some expected frequencies are lower than 5, it wasn't justifiable to inspect differences in the number of other reported breastfeeding termination reasons (Table 4).

Table 4. *The most frequent reasons for breastfeeding termination in the control and experimental groups*

	control		experimental		χ^2	Df	p
	N	%	N	%			
I'm breastfeeding.	67	74.4	77	90.6	10.583	1	0.001*
I had believed I didn't have enough milk.	15	16.7	2	2.4			
Painful and damaged nipples	5	5.6	3	3.5			
I felt restless and exhausted.	3	3.3	2	2.4			
I didn't have enough support during breastfeeding.			1	1.2			

Respondents in the experimental group more frequently reported that nurses/midwifes had a greatest influence on their breastfeeding attitudes (χ^2=17.371; p<0.001), while respondents from the control group more frequently reported that partners (χ2=3.874; p=0.049) and personal experiences (χ^2=4.28; p=0.039) had the greatest influence of their breastfeeding attitude (Table 5). There were no statistically significant differences between the control and experimental group in the number of respondents who reported that their greatest influence on breastfeeding attitudes was a physician (χ^2=2.155; p=0.146), mothers (χ^2=0.175; p=0.676), and friends (χ^2=1.405; p=0.236).

Table 5. *The biggest influence on attitudes toward breastfeeding in the control and experimental group*

	control		Experimental		χ^2	Df	p
	N	%	N	%			
nurse/midwife	9	10.0	31	36.5	23.476	5	<0.001
physician	11	12.2	5	5.9			
media	3	3.3					
partner	18	20.0	8	9.4			
mother	17	18.9	14	16.5			
personal experience	20	22.2	9	10.6			
friend	12	13.3	17	20.0			
other			1	1.2			

DISCUSSION

The results of this research show that there is an influence of midwifery education and listening to classical music during pregnancy on the length of breastfeeding in the midwifery, but the intervention had no significant impact on the frequency of breastfeeding at discharge from the maternity hospital.The high frequency of exclusive breastfeeding in both groups during the release is probably a consequence of a focused accreditation of the maternity ward in which the study was conducted. The implementation of the standards needed to gain the status of an accredited maternity hospital assumes the following: the presence of educational materials in places available to pregnant women and mothers, the joint stay of mother and child from birth to discharge from the hospital (unless medicaly indicated differently), the „skin to skin“ contact after birth, the first feeding achieved during the first hour after birth or as soon as possible, not using the bottles and pacifiers. Similar findings come from the study that examined midwife practices in the hospital in South London from 1997 to 2009, in which 2568 women were taken care of, including women with risk pregnancies (26). Statistically significant differences were found between the control and experimental group in the frequency of breastfeeding, six weeks after giving birth. Breastfeeding with supplementation was significantly more frequent in the control group compared to the experimental group. After 6 weeks, respondents with a completed higher education gave up exclusive breastfeeding somewhat more often compared to other respondents, but no

significant difference was found. Contrary to our results, studies that included breastfeeding women from Mostar (12) and Split (27) found that more women who breastfed exclusively had a higher degree of education. The fear of losing a job in the group of women with higher degrees of education and who were employed could be a possible factor in giving up on breastfeeding. Giving birth through Cesarean section didn't appear to be a significant predictor of giving up on exclusive breastfeeding six weeks after birthing. There was an equal frequency of giving up on exclusive breastfeeding in both groups - respondents who had a vaginal birth and those who had a Cesarean section. In a Canadian study (N=3021, singleton pregnancies), significant roles of educational status and the method of birth were found. More breastfeeding difficulties had women who delivered via Cesarean section; more women who asked for a Cesarean section and those with lower educational degrees gave up on breastfeeding earlier. Isik Y et al., in a sample of 169 women, found that a Cesarean section was a significant factor related to breastfeeding termination.

Six weeks after giving birth, one-third of the primiparas breastfed exclusively. Being a primipara could be regarded as a risk factor for breastfeeding termination. A study conducted in Jordanian health centers showed that primiparas also gave up on breastfeeding faster than multiparas. Antenatal education implementation for primiparas wasn't successful because only 36 of 107 women finished their education. Their absence was justified by the transportation impossibilities, husbands' disapproval, and their dissatisfaction with education. The real problem was the indifference to education (30).

Being a multipara in this study was a factor that was connected to exclusive breastfeeding in the puerperium. Primiparas in our study were significantly younger than other respondents, and they had the highest rate of breastfeeding termination after six weeks. That leads to conclusion that being a primipara and the age of respondents were a significant factors for exclusive breastfeeding termination.

For the respondents in the control group, primary support systems for breastfeeding were husbands and friends; for the respondents in the experimental group, primary support systems were husbands, family, and friends, but there wasn't a statistically significant difference between the groups. Given the high rate of giving up on exclusive breastfeeding in the control group, it is questionable if the impact of husbands and friends can be regarded as

support. The need to include fathers in future programs of pregnancy education is evident. Also, a more active public health promotion of breastfeeding is needed to support future mothers. A systematic review of research from 1990 to 2005, which examined breastfeeding support, concluded that women were more satisfied with their social support than their professional support and regarded it as more important. Also, they expressed dissatisfaction with the health system (unavailability of medical workers, opposite advice, the experience of a hospital as a public place, and time pressure) (31).

The biggest influences on breastfeeding attitudes in the control group in this study were partners and own experience. That certifies the belief that including partners is significant because their opinion can shape a partner's opinion, and inclusion leads to acquiring the necessary knowledge. In two parallel studies, conducted on 97 pairs, the impact of the mother's perception of the quality of partners' support on the length of breastfeeding and the intention to breastfeed was confirmed. In the experimental group, more than one-third of respondents stated that significant support in shaping their attitudes about breastfeeding was a midwife, unlike the respondents in the control group, who most frequently reported that partners and personal experience were a major influence. Knowledge acquired through education impacted the respondents' habit of seeking advice - they asked for help from health professionals. It also impacted their self-confidence to persist in exclusive breastfeeding. Most respondents from the control group that gave up on exclusive breastfeeding reported that the reason for giving up was their belief that they didn't have enough milk. That finding supports the need for educating the entire community, given that the respondents' attitudes in the control study were shaped by partners, family, and friends more than by midwives, compared to the experimental group, where respondents' attitudes were mostly shaped by midwives. Besides the education, the experimental group listened to classical music till the end of pregnancy. The impact of classical music was evident even in the milk composition. The milk of mothers who listened to classical music during breast milk expression expressed more milk that contained a higher proportion of fat compared to the milk of mothers who breast pumped without listening to classical music. Evidence comes from a study that examined 162 mothers of prematurely born babies (33). A study of 94 mothers divided into two groups also showed a higher frequency of breastfeeding during the hospital leave in the group that listened to

classical music. The difference was clinically but not statistically significant 60 days after leaving the hospital (34). The potential of listening to music in midwifery care is a field that hasn't been well researched. That is evident in a systematic review (2016) about different methods for milk production, which doesn't even mention the use of music (35). Nevertheless, there are reasonable expectations that music will impose a simple, efficient part of midwifery care. Another proof of that point comes from Duzgun and Ozer's systematic review from 2021 (that includes a 2081 randomized study), which shows that music significantly improves milk production. During this study, most respondents reported they listened to Mozart, while the smaller group reported listening to various musicians (Beethoven, Mozart, and Christian instrumental music). For now, there isn't much research on the musical impact on human behavior, but it is known that music impacts animals – it lowers the cortisol level and increases oxytocin levels. Oxytocin is a significant factor in establishing mutual connectedness (36). There are 2 shortcomings in the methodology of this research. Forming several groups, each of which would listen to different artists, would provide better evidence on the influence of a certain type of music on the length of breastfeeding. By separating the interventions (music and education), it would be possible to conclude which one brings more benefits in midwifery care and which would be a significant professional and scientific contribution of the research.

CONCLUSION

This research proved the impact of midwifery education and listening to classical music in pregnancy on the length of breastfeeding. A statistically significant difference was found in the frequency of exclusive breastfeeding six weeks after giving birth between the experimental (90.6%) and the control group (74.4%). Statistically significant differences weren't found between the control and experimental group in the frequency of exclusive breastfeeding and feeding with supplementation during the release from the hospital. A higher rate of giving up on exclusive breastfeeding was among respondents with a higher degree of education. Being a primipara and the lower age of respondents were important factors in giving up on exclusive breastfeeding. A method of birth wasn't a statistically significant factor for breastfeeding in this research. Respondents from the experimental group reported that nurses/midwives had the highest impact on

their attitude about breastfeeding, while respondents from the control study more often reported that their partner and their own experience had the highest impact on their breastfeeding attitudes.

Results indicate that the investment in mothers' competencies and making conditions for implementing those competencies in their work can significantly influence the length of exclusive breastfeeding, and, consequently the motherhood experience. The implementation of music in midwifery is a new research field, but further studies and clear evidence are needed for it to become a valuable element of midwifery care.

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DULJINA DOJENJA: ULOGA PRENATALNE EDUKACIJE I SLUŠANJA KLASIČNE GLAZBE

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SAŽETAK

Uvod: Primjena glazbe u primaljstvu je novo istraživačko polje i potrebne su daljnje studije i jasni dokazi kako bi postala vrijedan element primaljske skrbi. Cilj rada je bio dokazati utjecaj edukacije trudnica i slušanja klasične glazbe na učestalost i duljinu dojenja na otpustu iz rodilišta i 6 tjedana nakon porođaja.

Ispitanici i metode: Prospektivno randomizirano kontrolirano istraživanje je provedeno 2019. Godine. Uzorak su sačinjavale trudnice s područja Hercegbosanske županije, njih 198 (N=198). Rezultati: Nije utvrđena značajna razlika u učestalosti isključivog dojenja i nadohrane između ispitivane i kontrolne skupine pri otpustu (88.9 % vs 92.2 %). Značajno veći broj ispitanica u ispitivanoj skupini su isključivo dojile u odnosu na kontrolnu skupinu nakon 6 tjedana od (χ^2=4,541; df=1; p-0,033).

Zaključak: Rezultati upućuju kako ulaganja u razvoj kompetencija trudnica i stvaranje uvjeta u rodilištima mogu značajno utjecati na duljinu trajanja isključivog dojenja.

Ključne riječi: primaljska edukacija, muzikoterapija, isključivo dojenje, babinje

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