

The Application of Autogenic Training in Counseling Center for Mother and Child in Order to Promote Breastfeeding

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ABSTRACT

The aim of this study was to investigate whether mothers with newborn children, the usage of autogenic training with advice on breastfeeding effect on: the decision and the duration of breastfeeding, increase maternal confidence and support. It was assumed that the above result in a higher percentage of mothers who exclusively breastfed baby during the first six months of child's life. The survey was conducted in the Association »For a healthy and happy childhood«-Counseling center for mother and child, in Bjelovar in 2010. The Counseling center was attended by 100 nursing mothers with children aged up to two months. They randomly went to the study or control group. Mothers of both groups were advised to successful breastfeeding. Study group has practiced autogenic training until the child's age of six months. In parallel, by using psychotherapeutic interview and specific questionnaires we collected data on the somatic, psychological and social situation of the mother, discovered mother's mental changes (anxiety, depression) that were treated. The results at the end of the study confirm the initial expected benefits from the application of autogenic training. Mothers of the study group were significantly more emotionally balanced with a higher self-esteem. Autogenous training with the advices for successful breastfeeding conducted in this counseling center contributed in significantly higher rate of breastfeeding children up to six months of life, improved mental and physical health of mother and child and their peculiar relationship.

Key words: *autogenic training, promotion breastfeeding, counseling centre*

Introduction

Breast milk is the best food for infant. Breastfeeding is considered the best and most economical way to feed the child, preventing disease and promoting health. Breastfeeding has a positive effect on: mother, family and society achieving health, nutritional, immunological, developmental, psychological, social, economic and environmental well-being. Therefore, the protection, promotion and support of breastfeeding are public health priorities in all countries¹. World Health Organization (WHO) and UNICEF recommend exclusive breastfeeding up to six months child's life and then continue breastfeeding with

supplementation at least until the age of one or two years, so longer, as long as mother and child want²⁻⁴.

What is happening with breastfeeding? Fifty years ago WHO and UNICEF said there were less and less children on a natural food in the world. Modern life leads to early emotional and spacious separations of the child and mother, periodic and »bottle feeding«. It was warned about the negative consequences for the health of children and mothers. According to statistical data at national level and the research office of UNICEF in the Re-

public of Croatia 50% of mothers give up breastfeeding after the first month of the child's life, and only 13.4% of mothers exclusively breastfeed the baby during the first six months of a child's life. These percentages are much higher in many other countries: in Sweden: 97%, in Brazil: 93%, in New Zealand: 93%, in Germany: 90%, in USA: 70%...⁵⁻⁸. The reasons for that are different^{9,10}. The first group factors are associated with the position of women in society, public life, employment, and her general affirmation. This development of the society is not sufficiently followed by the organization of life and family. Another factor is the appropriate health care: lessons during pregnancy, maternity organization, procedure with the child and mother during first days after delivery, and training and care during the first months of child's life. The third group factors relate to the general solutions for the promotion of breastfeeding to public health and national level. The attitude of pediatricians, the implementation of health education programs among young women and pregnant women, the proper attitude towards breastfeeding in the maternity hospitals, support and protection of breastfeeding after leaving the maternity hospital are part of a national strategy. This opposes to the lack of information, fashion style, the negative impact of the food industry on advertising of breastmilk substitutes and the often unspoken fear of the negative impact of breastfeeding on body weight, physical appearance, beauty and sexual attraction for the mother. Knowing the value of breast milk for child growth and development is important factor for the success of the national breastfeeding program. Breast milk meets all the metabolic needs of the infant. It is biological substance with more than a hundred active enzymes, and not just the complex structure of many nutrients. It is biologically more flexible than the milk of another species^{2,11,12}. The superiority of breast milk is nicely summarized in Pinaud's aphorism: »Milk and mother's heart haven't got replacement«.

Many studies show that the positive effects of breastfeeding are reflected in reduced mortality and morbidity in breastfed children. It promotes: immune, cognitive, emotional and social development of children with implications for children health. It is proven to decrease the incidence of: acute ear infections, urinary tract, necrotizing enterocolitis, sudden infant death syndrome, allergic disease, type I diabetes, obesity and diabetes type II, acute lymphoblastic leukemia, Hodgkin disease and neuroblastoma². Breastfed children have an average of 4.9 index points higher on tests of intellectual development than children on artificial food^{13,14}. Breastfeeding for six months or more have positive effect on the mental health of children till adolescent age¹⁵. Women who are breastfeeding decreased the risk of breast cancer^{16,17}, ovary cancer¹⁸, diabetes II¹⁹ and lower incidence of postpartum depression^{18,20}. Breastfeeding is an exceptional experience with a psychologically positive effect on the mental stability of both mother and child. These are the reasons to engage in activities to protect and support breastfeeding.

In 1974 WHO adopted a Resolution on the importance of breastfeeding, and in 1981 accepted the International Code of Breast-milk substitutes²¹. In 1989 WHO and UNICEF defined »The 10 steps to successful breastfeeding« whose views should follow every institution that provides services to parents and care for newborns¹⁻¹¹. The UN declared the Convention on the Rights of the Child in 1989²² and in 1990 WHO and UNICEF adopted the Declaration Innocenti²³. In 1991 the World Alliance for Breastfeeding action (WABA) is established. WABA has declared the first week in August every year—the week dedicated to the promotion of breastfeeding. In 1991 start activities for »Baby-Friendly Hospitals«²⁴. In the maternity hospital mother should learn the technique of breast feeding, breast care and become aware that she can feed her child. It is important to enable the early contact with the child and try to be always together. Close skin-to-skin contact encourages the formation of milk significantly earlier. Mother learns to feed your baby on demand rather than by a particular rhythm²⁵⁻²⁷. In the world almost 30% of maternity hospitals earned this certification, and this increased rates of breastfeeding. However, reduced funding, insufficient training and the omissions have contributed to the stagnation or decrease in breastfeeding rates in many countries. Breastfeeding has been identified as a priority in the first draft of the nutrition policy of the European office of WHO for the period 2000–2005²⁸, Resolution of the Council of the EU Nutrition and Health in 2000²⁹ and the EU project for the promotion of breastfeeding in Europe³⁰. 2002 brings the Global Strategy for Infant and Young Child, which was accepted by all member states of WHO³.

UNICEF and the Ministry of Health and Social Care in Croatia conducted the program called »Baby-Friendly Hospitals«^{25,31}, but it was interrupted from violation of international rules on the promotion of breastmilk substitutes. The program continued later under the revised criteria. Slightly more than half of maternity hospitals in Croatia have the status »Baby-Friendly Hospital«, and soon it is expected that all of the remaining hospitals gain that title. The implementation of this program increases the rate of breastfeeding at the local, national and global level. However, half of mothers give up exclusive breastfeeding after the first month of life. This indicates the importance of supporting mothers in breastfeeding after leaving the maternity hospitals. In »Baby-Friendly Hospital« step 10 emphasizes the need to protect and support breastfeeding from the community, where the main role have health professionals in primary care. Researches have shown that organized community support for continuing breastfeeding in the postpartum period, along with activities to promote breastfeeding in maternity hospitals, contribute significantly increase the length of breastfeeding^{25,32-37}. These programs are conducted throughout the world^{138,39} in order to join the work of health professionals and public health organizations that promote breastfeeding. At the Symposium on breastfeeding in Čakovec (Croatia) in 2008 was presented program named »Counseling Centers for Children-Friends

of Breastfeeding«. It was accepted by the Office of UNICEF for Croatia and the Commission for the Promotion of breastfeeding Croatian Ministry of Health and Welfare³⁸. Our research was conducted by the Association for a healthy and happy childhood-Counseling center for mother and child in Bjelovar, Croatia. Counseling program is designed in the form of »Ten Steps to Successful Breastfeeding«.

Subjects and Methods

In this prospective study we analyzed data about breastfeeding and maternal mental health by monitoring mothers from their first visit to the counseling center (when child was in the second month of age) till the age of six months. 100 women–mothers who breastfed the child, have voluntarily joined the study which was conducted throughout year 2010. The criterion for inclusion in the study was that the mother was nursing her child and the child had up to two months. We respected all the ethical aspects of the research. Mothers were randomly divided into two groups–examined and control. Each consisted of 50 mothers with breastfed infants, but mothers from examined group learning autogenic training. Mothers of both groups were advised to successful breastfeeding up to six months of age. At the end of the study mothers were re-tested. The collected data were treated statistically. We determined the following indicators: attitude, decision and duration of breastfeeding, mother's level of confidence, the motivation for successful breastfeeding, the motivation for autogenic training, with the possible factors influencing breastfeeding, risk factors for postpartum mental disorders, anxiety and postpartal depression. We also evaluated the degree of satisfaction with practising autogenic training and its possible role in promoting successful breastfeeding in the examined group.

Psychotherapeutic interview

Mothers who have joined the study, went through the psychotherapeutic interview. This method helped us to get insight into mothers' somato-psycho-social situation as well as diagnosing mental changes and assessing their motivation to breastfeed. After the interview, we applied specific questionnaires.

General registration questionnaire for the mother and the child

The aim of questionnaire in order to detect the possible influence of factors for deciding breastfeeding and the length of breastfeeding, as well as preterm termination of breastfeeding. We also collected: sociodemographic data on maternal, child and their family, information about the mother's childhood, previous pregnancy, childbirth and breastfeeding and success in the ongoing health of the mother and child. We detected risk factors for postpartum mental disorders.

The questionnaire on breastfeeding

It was own structured questionnaire and it consisted in two parts. The first part of the questionnaire filled in all the mothers at the start of the study, and the second part at the end (after six months of age). The first part was aimed at gaining insight into the work programs undertaken with pregnant women/mothers with the goal of successful breastfeeding. Other part of the questionnaire helped us to determine the number of exclusively/predominantly breastfed babies during the first six months of life, discover the reasons of preterm termination of breastfeeding, assess the mother's motivation to continue breastfeeding and the degree of satisfaction by their past support of breastfeeding.

State-trait anxiety inventory for adults (STAI) and Edinburgh postnatal depression scale (EPDS)

Concurrently, we followed up mothers with postpartum psychological symptoms/disorders because of the potential negative impact on breastfeeding and the relationship between mother-child⁴⁰. We have implemented: State-Trait Anxiety Inventory for Adults (STAI) and Edinburgh Postnatal Depression Scale (EPDS). The STAI Form Y is the definitive instrument for measuring anxiety in adults. It clearly differentiates between the temporary condition of »state anxiety« and the more general and long-standing quality of »trait anxiety«. It helps professionals distinguish between a client's feelings of anxiety and depression⁴¹. STAI was applied twice–at the beginning and end of the study. It was used to detect mothers with anxiety and to assess anxiolytic effect of autogenic training. Edinburgh Postnatal Depression Scale (EPDS) revealed mothers with postpartum depression. The scale has a specificity of 92.5% and sensitivity 88%⁴². It was applied twice during the study–at the beginning and end. It also served for the assessment of antidepressant effects of autogenic training.

Satisfaction survey and assessment of success in breastfeeding by practising autogenic training

This questionnaire met only the mothers from the treatment group. The purpose of this self-constructed questionnaire was that mothers who breastfed and practiced autogenic training determine the degree of satisfaction with practice, and independently assess the contribution of exercise in the success of breastfeeding.

Practising autogenic training

Only mothers from examined group were learning autogenic training with the trainer. We assumed that autogenic training by its relaxation would increase self-confidence, so that such mothers could breastfeed successfully. All such problems during breastfeeding mother will receive in a more peaceful way, with the support of professional staff and find the right solution to solve them. Every two weeks mothers were practicing a new exercise. The six basic exercises of autogenic training were taught for 12 weeks in small groups to 10 members.

Exercising in a group is suggested^{43,44} because of the basic mechanisms of the group: identification, group dynamics, group atmosphere and psychological phenomenon of »reflection group«. Most of the mothers came to practice with the child. Training techniques were easy to adopt, while warning of problems and experiences during training. Mothers were also practicing alone, at home (recommended: three times daily). At the beginning of each meeting, the group talked about experiences during the exercise at home. With compliance and motivation to exercise, each group was becoming a single organism with a common purpose: to breastfeed as long as possible. At the end of each exercise, the mothers were given the suggestion of breastfeeding with the aim of building a distinctive mother-child relationship, such as: »I love my child and nursing it with joy!«, »My breasts are beautiful, healthy and rich of milk!«, »My milk is the best food for my child!«, »My milk and my heart are the greatest value for my child!«, »My milk and my kiss of peace is a blessing and a gift of love for my child!«.

After mothers have learned all the exercises of autogenic training, they have continued to practice until their child reached six months of life. Then, as the mothers in the control group, were invited back for an interview and fill out the questionnaire. Contrary to these optimal emotional conditions of mothers towards their children, we also have available with the results of negative emotional attitudes of mothers towards unwanted children^{45,46}.

Results

In the study period were analyzed data for 100 mothers and their infants-members of Counseling Center for Mother and Child in pediatric practice of Marija Čatipović, MD in Bjelovar. The sociodemographic characteristics of mothers of both groups (experimental and control) were in a very high correlation/very tight relationship, so that groups were similar to each other (r=0.989).

In the first part of the questionnaire on breastfeeding, we assessed satisfaction with the health care of mothers

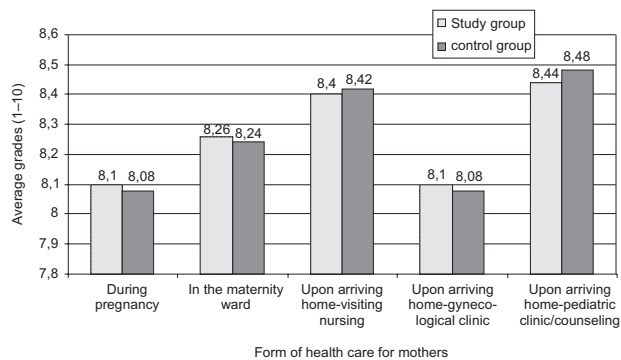


Fig. 1. Histogram of the questionnaire on breastfeeding / I. part. Average ratings for the provided health care in order to support and protect breastfeeding in mothers of experimental and control group.

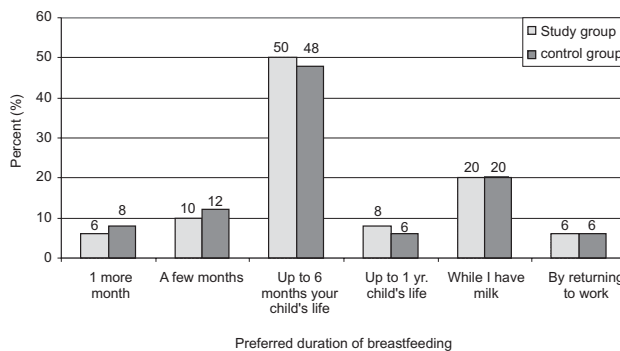


Fig. 2. Histogram of responses to partice 24th questionnaire about breastfeeding / I. part: »How long you would like to breastfeed your child?«.

and children support to breastfeeding: during pregnancy, during their stay in the maternity hospital, on arrival home after giving birth in pediatric and gynecologic clinics. Satisfaction of mothers was graded on a scale from 0 (very dissatisfied) to 10 (extremely satisfied) (Figure 1). The graph shows that the mothers of both groups were very satisfied with the health care in order to support and protect breastfeeding, because they are all average grades greater than eight. Comparing the average score within the test and control group, we found that in both groups of mothers were most satisfied with the provided support breastfeeding in pediatric outpatient/clinic (average grade: 8.44 for experimental and 8.48 for the control group), and then visiting the provided care (average rating: 8.40 for experimental and 8.42 for control group). These average ratings show a statistically significant difference compared with all others average scores within each group (eg, experimental group, »the visiting care« vs. »in the maternity hospital« $d^2=6.020$, $s=0.351$, $s_x=0.050$, $t=2.824$, $p<0.05$; control group, »the visiting care« vs. »in the maternity hospital« $d^2=7.380$, $s=0.388$, $s_x=0.055$, $t=3.280$, $p<0.05$). It was not find statistically significant difference between the two above the highest average rating among the groups (study group, »the visiting care« vs. »counseling« $d^2=1.920$, $s=0.198$, $s_x=0.028$, $t=1.429$, $p>0.05$; control group, »the visiting care« vs. »in the maternity hospital« $d^2=4.820$, $s=0.314$, $s_x=0.044$, $t=1.353$, $p>0.05$). Comparing the average score of the same forms of aid between the experimental and control groups, significant differences were not found.

With this questionnaire, we also assessed the mother's attitude toward breastfeeding and motivation for breastfeeding, according to the answer to the question: »How long you would like to breastfeed your child?« The answers show the histogram (Figure 2). We have found that only about 50% of mothers in both groups were motivated to breastfeed child until six months of age, or from 6–8% in one year. A large percentage of mothers who intended to breastfeed their child while they will have milk (20% in both groups), which means a lack of confidence in their ability to meet the child's feeding needs. About a third of mothers of both groups had no

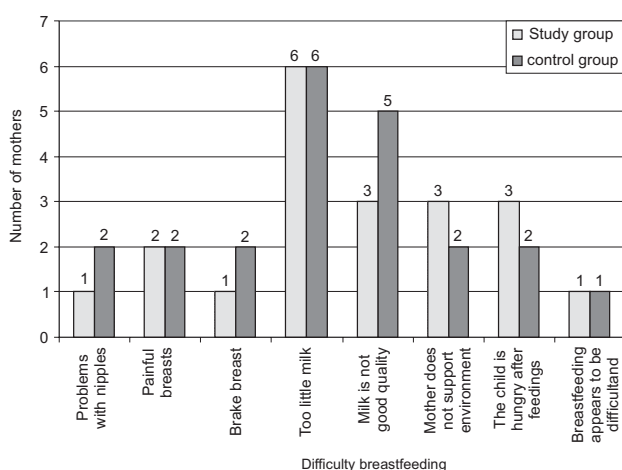


Fig. 3. Histogram of difficulties in relation to breastfeeding in mothers of experimental and control group.

defined position on breastfeeding and did not create a decision on the duration of breastfeeding, suggesting that is just such a need advice and support to not give up too early from breastfeeding. Both groups of mothers were at a very high correlation/very close relationship and are similar to each other ($r=0.996$).

With this questionnaire, we found problems related to breastfeeding (Figure 3). Difficulties in breastfeeding were detected in 20 mothers of the experimental and in 22 mothers of the control group. Between both groups there was a high correlation/explicit correlation ($r=0.820$). In both groups were found these difficulties: »too little milk«, »milk is not good quality« and »child is hungry after feeding«. For these mothers, there is also a lack of confidence and faith in their ability to breastfeed the child. Thus, we confirm the necessity of continued support for successful breastfeeding.

With second part of the questionnaire, we learned how many mothers were exclusively/predominantly breastfeed their babies six months of life, discovered the reasons for early termination of breastfeeding, found about the mother's motivation to continue breastfeeding, and we determined the degree of satisfaction by their past support of breastfeeding in the clinic. In the experimental group even 47 of 50 mothers (94%) fully breastfed their child during the first six months of life, while those in the control group were 17 (34%) (Figure 4). Predominantly breastfed in the controls were 18 (36%). In both groups the rate of exclusive breastfeeding is above average Republic of Croatia. This can be interpreted with effectively support breastfeeding in the counseling center. The difference in the rate of full breastfeeding rates between the experimental and control groups was statistically significant ($\bar{X}_1-\bar{X}_2=0.600$, $S_{\bar{X}_1-\bar{X}_2}=0.076$, $t=7.926$, $p<0.05$) and could be attributed to the role of autogenic training. Correlation between groups was insignificant ($r=0.137$). In the study group three mothers prematurely stopped breastfeeding and 15 in the control group. The reason for early termination of breastfeeding for all

three mothers from the study group was the lack of milk, while for the ten mothers of the control group the reason was »no support from the environment« and for the other five »baby was hungry after feeding«. In the study group, 45 of 47 (96%) wanted to continue breastfeeding up to one year of age, and 28 control mothers of 35 (80%). We found that the support of breastfeeding in counseling center was more effective in order to support continuing breastfeeding ($\bar{X}_1-\bar{X}_2=0.340$, $S_{\bar{X}_1-\bar{X}_2}=0.083$, $t=4.103$, $p<0.05$). We determined the satisfaction of supporting breastfeeding mothers in counseling center-for the experimental group average score was 9.70 and for the control group-average grade was 8.26. In addition to a very high average rating, the results indicate a statistically significant difference at a significance level of 5% between the arithmetic mean of the experimental and control groups ($\bar{X}_1-\bar{X}_2=1.44$, $S_{\bar{X}_1-\bar{X}_2}=0.128$, $t=11.25$, $p<0.05$), which means that mothers from experimental group were more satisfied with the support of breastfeeding in the counseling center. The reason for these higher ratings in the experimental group of mothers could be applied technic of autogenic training in order to support breastfeeding.

State-Trait Anxiety Inventory for Adults (STAI) was administered at the beginning and end of the study for all mothers of experimental and control group (S- and O-scale). For the results we have used a table with the normative data for healthy female persons aged 19–39 years and a table with the normative data for neuro-psychiatric patients with anxiety reactions. We found 14 mothers in the experimental (28%) and 15 mothers in the control group (30%), with prominent anxiety. We also found correlation between the S- and O-scale, so we concluded that all mothers expressed anxiety as a trait and expressed the state of anxiety. There was no statistically significant difference at a significance level of 5% between the arithmetic mean of the experimental and control group at baseline for both scales (S-scale: $\bar{X}_1-\bar{X}_2=0.033$, $S_{\bar{X}_1-\bar{X}_2}=0.459$, $t=0.072$, $p>0.05$; O-scale: $\bar{X}_1-\bar{X}_2=0.362$, $S_{\bar{X}_1-\bar{X}_2}=0.545$, $t=0.664$, $p>0.05$), which means that both groups of mothers were similar to each other. Every mother who anxiety was discovered had indications for therapy, autogenic training, but because of the research it was applied just for mothers of experimental group. So we can assess the effectiveness of autogenic training in

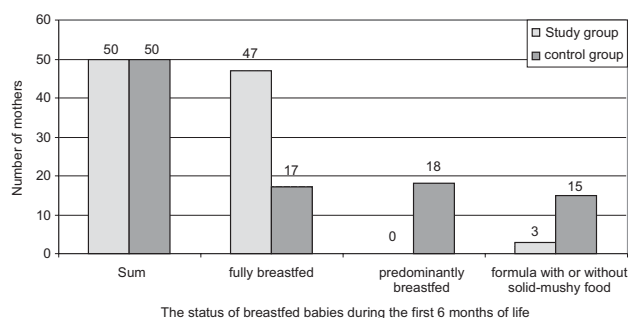


Fig. 4. Histogram for questionnaire about breastfeeding /II. part: »Is your milk the only food for your child now?«

the treatment of anxiety. S-scale is a sensitive indicator of the success of training in relaxation techniques, while the results achieved on the O-scale are useful for assessing short- and long-term outcome of psychotherapy. STAI we reapply to all mothers at the end of the study. STAI summary of the results for mothers with anxiety of experimental and control group is shown in the table (Table 1).

Results at the end of the study indicate a statistically significant difference at a significance level of 5% between the arithmetic mean of the experimental and control group for both scales (S-scale: $\bar{X}_1 - \bar{X}_2 = 12.538$, $S_{\bar{X}_1 - \bar{X}_2} = 0.466$, $t = 26.906$, $p < 0.05$; O-scale: $\bar{X}_1 - \bar{X}_2 = 12.067$, $S_{\bar{X}_1 - \bar{X}_2} = 0.447$, $t = 27.009$, $p < 0.05$). Comparing the results of the test group of mothers at the beginning and end of the study, we found a statistically significant difference at a significance level of 5% for both scales (S-scale $\bar{X} = -12.571$, $s_{\bar{X}} = 0.402$, $t = 31.271$, $p < 0.05$; O-Scale: $\bar{X} = -12.429$, $s_{\bar{X}} = 0.510$, $t = 24.371$, $p < 0.05$), so we conclude from this that the autogenic training functioned anxiolytic. According to normative data from the Manual on the STAI, the results of the test group of mothers at the end of the study were located within the allowable limit for a healthy female population aged 19–39 years.

At the end of the research using STAI, we have discovered four new mothers in the control group with signs of anxiety as the condition and performance while in the experimental group was not new discovered mothers. These results could also be attributed to the anxiolytic effect of autogenic training.

Edinburgh postnatal depression scale (EPDS) was applied twice during the study-at the beginning and end. EPDS revealed 11 mothers from the experimental (22%) and 10 mothers from the control group (20%) with symptoms of postpartum depression. For the seven mothers of the experimental group (64%) and six mothers of the control group (60%) was their first depressive episode. All of them had indication for therapy with autogenic training, but because of the research only group of moth-

ers from the experimental group applied it. So we can assess the effectiveness of autogenic training in the treatment of postpartum depression. By reusing the EPDS in all mothers at the end of the study we assessed the effectiveness of autogenic training for the treatment of postpartum depression. EPDS summary of the results for mothers with postpartum depression for the mothers from the experimental and control group is shown in a table (Table 2). There was no statistically significant difference at a significance level of 5% between the arithmetic mean of the test and control group at baseline ($X_1 - X_2 = 0.409$, $S_{X_1 - X_2} = 0.544$, $t = 0.752$, $p > 0.05$), which means that both groups of mothers were similar to each other. The results obtained at the end of the study indicate a statistically significant difference at a significance level of 5% between the arithmetic mean of the test and control groups ($X_1 - X_2 = 6.12$, $S_{X_1 - X_2} = 0.528$, $t = 11.590$, $p < 0.05$). Comparing the results of the experimental group of mothers at the beginning and end of the study, we found a statistically significant difference at a significance level of 5% ($X = -5.909$, $s_x = 0.091$, $t = 64.93$, $p < 0.05$), and from this we can conclude that autogenic training acted to reduce the symptoms of postpartum depression. According to normative data for the EPDS, the results for mothers of the experimental group at the end of the study were answered as the results of healthy individuals. With EPDS questionnaire at the end of the study we discovered two new mothers in the control group with postpartum depression while in the experimental group, there were no new cases of mothers. These results could also be attributed to the antidepressant effect of autogenic training.

Results of satisfaction survey and assessment of success in breastfeeding by applying autogenous training showed a high degree of satisfaction in the first months after birth (Figure 5). Even the 44 mothers (88%) said they were very satisfied or satisfied. The effect of autogenic training on the success of breastfeeding was very strong for 5 mothers (10%), strong for 27 mothers (54%), fairly strong for 14 of them (28%) (Figure 6).

TABLE 1
RESULTS FOR STAI IN THE MOTHERS WITH PROMINENT ANXIETY – BEGINNING AND END OF THE RESEARCH

Examination group of mothers with anxiety N=14				Control group of mothers with anxiety N=15			
Start of the research		End of the research		Start of the research		End of the research	
S-scale	O-scale	S-scale	O-scale	S-scale	O-scale	S-scale	O-scale
\bar{X} 50.500	\bar{X} 50.429	\bar{X} 37.929	\bar{X} 38.000	\bar{X} 50.533	\bar{X} 50.067	\bar{X} 50.467	\bar{X} 50.067
SD 1.345	SD 1.555	SD 1.328	SD 1.301	SD 1.125	SD 1.387	SD 1.187	SD 1.100

TABLE 2
RESULTS FOR EPDS IN MOTHERS WITH POSTPARTUM DEPRESSION – BEGINNING AND END OF THE RESEARCH

Examination group of mothers with postnatal depression N=11		Control group of mothers with postnatal depression N=10	
Start of the research	End of the research	Start of the research	End of the research
\bar{X} 16.091	\bar{X} 10.182	\bar{X} 16.500	\bar{X} 16.300
SD 1.136	SD 0.982	SD 1.354	SD 1.418

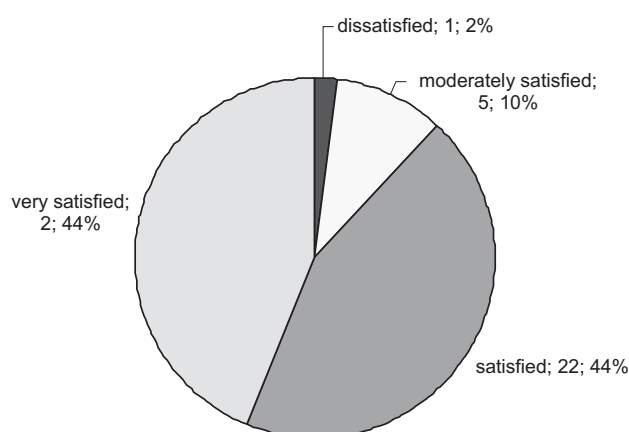


Fig. 5. Histogram showing satisfaction with autogenous training in maternal treatment group (n=50).

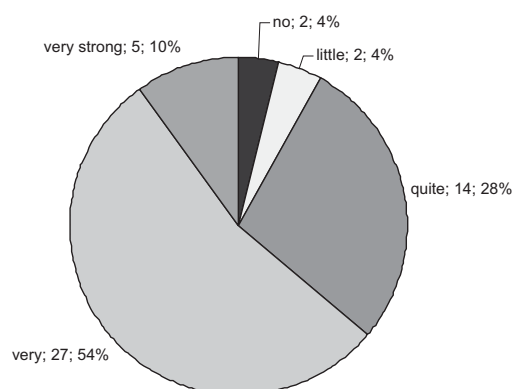


Fig. 6. Histogram showing the influence of autogenous training on the success of breast-feeding (n=50).

Discussion and Conclusion

There are scientifically based evidence on the benefits of breastfeeding for the health of children, mothers, families and society as a whole, as well as awareness of breastfeeding as the basis of health, nutrition, immune, developmental, social, economic and environmental well-being of each community. In Croatia, due to low rates of breastfeeding, UNICEF and the Ministry of Health and Social Welfare conducted a program to promote breastfeeding at the local, national and global level. It is emphasized the need to support breastfeeding mothers after leaving the maternity hospital providing activities in Counseling center for mother and child.

This research examined whether autogenic training used along with tips for successful breastfeeding counseling, affected the increase in mothers who exclusively breastfed baby during the first six months of life. This study was designed so that there were tested and the control group, with the only significant difference being that the mother in treatment group have been practicing autogenic training to six months child's life. Concur-

rently, psychiatric interviews and specific questionnaires discovered maternal psychological disturbances (anxiety and depression).

The postpartum period is considered a period of increased risk for the development of affective disorders⁴⁷. DSM IV⁴⁸ distinguishes three subtypes of mood disorders: »postpartum blues«, postpartum psychosis and postpartum depression. There are increased reports with women with postpartum obsessive-compulsive and panic disorders. »Postpartum blues« is a relatively mild emotional disorder that affects 50–80% of women and is the most common puerperal mood. In accordance with the research, about 20% of women »postpartum blues« will develop postpartum depression, which will last up to one year after childbirth. Postpartum psychosis is fortunately rare but serious condition that occurs in one to two mothers *per* 1000 deliveries. Postpartum depression is relatively common and affects 10–20% of women within one year postpartum period. Most women develop symptoms one month after birth, and some symptoms lasting up to one year. For as much as 60% of the women was the first depressive episode. Positive personal or family history of previous episodes of affective disorders and especially the postpartum are the most important risk factors. Anxiety and depression during pregnancy are considered important indicators for the future development of postpartum depression^{40,49,50}. Postpartum depression has a direct impact on the social functioning of mothers, disrupts the normal relationship of mother and child, and negatively affects cognitive and emotional development of child^{51–55}. There is significant correlation between maternal postpartum depression and the child's reduced commitment to the mother, which sometimes led to mutual avoidance⁵⁶. It is therefore essential to build good relationship between mother and child, because the basis of later child functioning. It is proposed to all women during the postpartum period to be screened for depression^{40,50,57}, and consider the possible methods of intervention. The advantage, wherever it may have psychotherapeutic methods, because all psychopharmacs excreted in breast milk and feeding can reach to the child. Prophylaxis and prevention of postpartum depression are considered to be applicable and effective technique to pregnant women with increased risk.

Autogenic training is a suggestion-supportive psychotherapy technique. Experienced physical changes lead to psychological relaxation. We use consciously selected positive thoughts and ideas to fight against the fear. Final effect is anxiolytic⁴³. External threat causes fear of destruction of the body, and internal causes danger to destruct mental balance. If the internal threat lasts longer and if not removed, it will cause various physical and psychological changes that may manifest as psychosomatic and neurotic disorders. For example, the disease may occur in which they are present only physical changes, without physically expressed anxiety (neurovegetative dystonia), or fear can be modified in the physical symptom (convulsive neurosis) or the energy of fear associated with the fear of certain events, objects or people (phobia)

or defending themselves from the fear of people resorting to an earlier form of regressive behavior (coercive actions, thoughts or words). Fear can be so strong that it can take half of the human personality, which will then split up such a personality and to reject the split-personality causing schizophrenia. When there is a form of selfpunishment, depression occurs. In mania, it occurs denial of subjective risk. Therefore, removing anxiety (eg autogenic training) can effectively prevent and remove these disturbances. Physical and mental peace are the ultimate goal of autogenic training. We can remove conflicts from the unconscious and thus prevent their accumulation and unable decompensation. Autogenic training gives tolerance, easier sharing of affective reactions and willingness to accept all content that you encounter. During basic training we gain confidence and trust in ourself. Relaxation is a permanent personality change, which leads to better quality of life.

All this forms the basis for the application of autogenic training during pregnancy and after childbirth, which have many advantages. Autogenic training in the early stages of pregnancy helps coping with nausea, vomiting, constipation, insomnia, shortness of breath, anxiety and increased sensitivity. Fear and anxiety of the actual birth can also be reduced^{40,43}. Decrease in muscle tension and pain perception, optimal blood pressure and heart activity, decreased fatigue and exhaustion due labour were also proven^{43,44}. It is therefore recommended

that women begin practicing autogenic training as early as possible, or even pre-conception and pre-pregnancy⁵⁸.

Scientific research which explores the application of autogenic training for mothers after childbirth to promote breastfeeding has not been carried out in Croatia. Nor in the world there were no similar studies. Mothers in examined group at the end of the study were significantly more emotionally balanced and a higher self-esteem, which was consistent with findings in the literature on the anxiolytic and antidepressant activity of autogenic training. We believe that these are just the general benefits of autogenic training and it had positive influence on the prolonged duration of breastfeeding, which resulted in a statistically higher rate of exclusive breastfeeding of children up to six months of age. This could mean that a relaxed mother and one with greater confidence, could more successful breastfeed. Difficulties during breastfeeding could be accepted easier and with the support of other professionals find solution and persisted in breastfeeding her child. Despite the high satisfaction with counseling, mothers were more satisfied when the tips for successful breastfeeding and used autogenic training. Observed a large number of mothers examined groups have estimated that just autogenic training effect on the success of their breastfeeding. Therefore we can conclude that the application of autogenic training in counseling for mothers to breastfeed to effectively participate in supporting and promoting breastfeeding in Croatia.

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PRIMJENA AUTOGENOG TRENINGA U SAVJETOVALIŠTU ZA MAJKU I DIJETE S CILJEM PROMICANJA DOJENJA

S A Ž E T A K

Cilj provedenog istraživanja bio je ispitati hoće li kod majki s novorođenom djecom primjena autogenog treninga uz savjetovanje o dojenju utjecati na: odluku za dojenje i duljinu trajanja dojenja, povećanje majčinog samopouzdanja i davanje podrške. Pretpostavilo se da će navedeno omogućiti veći postotak majki koje isključivo hrane dijete dojenjem tijekom prvih šest mjeseci djetetovog života. Istraživanje se provodilo u Udruzi »Za zdravo i sretno djetinjstvo« – Savjetovalište za majku i dijete, u Bjelovaru tijekom 2010 godine. U savjetovalištu je sudjelovalo 100 majki–dojilja s novorođenom djecom starosti do dva mjeseca. Metodom slučajnog odabira pripale su ispitivanoj ili kontrolnoj skupini. Majke obje skupine savjetovane su za uspješno dojenje. Ispitivana skupina vježbala je autogeni trening do navršenih šest mjeseci djetetovog života. Usporedno, metodama psihoterapijskog intervjuja i posebnim upitnicima, prikupljeni su podaci o somatskoj, psihičkoj i socijalnoj situaciji majke, otkrivene su eventualne psihičke promjene majke (anksioznost, depresivnost i dr.) koje su liječene. Rezultati na kraju istraživanja potvrđuju početne očekivane koristi od primjene autogenog treninga u svezi s učestalosti dojenja. Majke ispitivane skupine bile su značajno bolje emocionalno uravnotežene i većega samopoštovanja. Vježbanje autogenog treninga uz savjete za uspješno dojenje provedeno u ovome savjetovalištu doprinjelo je značajno većoj stopi dojenja djece u dobi do šest mjeseci života, unaprjeđenju psihofizičkog zdravlja i majke i djeteta i njihovog osebnog odnosa.