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# MENTAL DISORDERS/DIFFICULTIES IN THE POSTPARTUM PERIOD

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## *SUMMARY*

***Introduction:*** *Mental difficulties are common in the postpartum period. They can manifest in a mild form, but also as serious disorders which need to be treated in a timely manner. The most common psychological problem is "Baby blues" characterized by relatively short duration without consequences and treatment is largely unnecessary. Postpartum depression is characterized by a sense of sadness, loss of interest, insomnia, discomfort, loss of energy, reduced concentration. Postpartum psychosis is the most serious disorder but is also rare and may have serious consequences for the mother and child. Important factors in the postpartum mental problems/difficulties are genetic factors, situation of unwanted pregnancy, a feeling of discomfort with the role of motherhood and sudden hormonal changes.*

***Aim:*** *to investigate the frequency and type of mental problems in postpartum period, as well as possible type of help needed by the women in postpartum period.*

***Subjects and methods:*** *One hundred (112) respondents participated in the survey. The survey was conducted from November to December 2017 through a "google docs" application. The survey was placed on different social networks, and the participation in the survey was voluntary and anonymous. A series of 14 questions with the offered answers was used in the survey.*

***Results:*** *The results of the survey have shown that psychological difficulties and disturbances in the postpartum period to be common problems encountered by almost 50% of women (44.46%). The most common difficulty is Baby blues, followed by postpartum depression and anxiety disorders. Age and the mode of birth did not affect the emergence of changes, while social factors such as family support had a great impact.*

***Conclusion:*** *The provision of information to the mothers can help, but inaccurate information can do the opposite. Thus, the role of health care professionals is important for helping mothers in that period to prevent certain difficulties as well as in identifying and referring mothers to seek help in a timely fashion.*

***Key words:*** *mental disorders /difficulties - health care professionals - education - prevention*

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## INTRODUCTION

The postnatal period, especially the first six weeks is very stressful for mothers in developing an emotional connection with a child, establishing the balance of the child's needs as well as at achieving their own good emotional and mental state (Misri & Burgman 1992). In the 1990s, the analysis of previous research has shown possible psychological changes during and after pregnancy such as postnatal sadness, depression or psychosis. Postnatal sadness or "Baby blues" is the slightest psychological discomfort mostly begining on the third day after childbirth in about 45-80% of women with symptoms of sadness, crying, and unstable emotions (Misri & Burgman 1992). According to related researches, postpartum depression (PPD) occurs in about 10 to 43% of women and depends on age, relationship (Misri & Burgman 1992, Upadhyay et al. 2017), unwanted pregnancy, education, previous workplace, genetic and family history of depression (Veisani et al. 2013, El-Ibiary et al. 2013). Certain risk factors for PPD are also connected with young mothers (19-25) who experience parenthood for the first time (Upadhyay et al. 2017, Vismara et al. 2016), level of maternal stress during pregnancy, the availability of postpartum support, previous diagnosis of depression (Laneset et al. 2011), low education and low socioeconomic status (Goyal et al. 2010, Gupta et al. 2013, Horowitz et al. 2011). Older mothers, mothers of younger children, those who are less willing to seek help and mothers who are more pleased with help have a lower prevalence for developing symptoms of PPD (Saligheh et al. 2014). Specific micronutrient deficiencies contribute to PPD development, probably through psychoneuroimmunology mechanisms (Ellsworth-Bowers & Corwin 2012). Mothers with depressive symptoms establish a weaker social interaction with their child (Mantisa et al. 2019, Ohashi et al. 20016). It is important to identify significant PPD predictors that can be easily detected by systematic testing in clinical practice for the identification of potentially risky mothers (Fiala et al. 2017). When talking about postpartum psychosis (PPP), a fast and accurate diagnosis is important for timely and appropriate treatment and providing rapid, complete recovery, prevention of future episodes, and risk reduction for the mother, child, and family (Sit et al. 2006). Mothers have four categories of their needs: the need for information, psychological support, the need for experience exchange, and needs for practical and material support

(Slomian et al. 2017). There is a direct correlation between depressive symptoms, anxiety and mothers' age, rural residence, and low income (Olaoluwa et al. 2019). Neuroscientists have shown that monitoring of some neural correlates of emotional anticipation in the post-partum period could identify changes occurring in neuronal folders responsible for certain emotions which affect the occurrence of depressive symptoms (Malin et al. 2017). This is also shown by research in Japan that established the validity of certain scales for measuring and screening of risk persons (Ikeda & Kamibeppu 2013). It is assumed that changes in mothers' behaviour in relation to a child can prevent PPD through several possible pathways of mediation: (1) increasing the effectiveness of parenting and consequently reducing negative self-deprivation; (2) a better sense of social support by the physician; (3) a better maternal dream; (4) more effective parental skills; (5) increased attachment to the child (Werner et al. 2015). Some studies have shown that interpersonal psychotherapy (IPT) intervention (Chien Wen et al. 2015) breastfeeding (Mezzacappa & Katkin 2002, Thome et al. 2006), mental training (Sheydaei et al. 2017, Potharst et al. 2017), light therapy (Crowley & Youngstedt 2012), and aromatherapy (Asazawa et al. 2017) can be successful treatment for PPD. Providing support to healthy women without any complications at home as well in the community, to prevent the occurrence of PPD is important (Takahashi & Tamakoshi 2014). The present study aimed to collect information about psychological disorder/disturbances in the postpartum period, to demonstrate which factors positively or negatively affect psychological difficulties after childbirth, how social support influences the prevention of psychological changes, and how community care affects the reduction of these difficulties in Croatia.

## SUBJECTS AND METHODS

The survey was conducted from September to October 2017 and was conducted through a "google" application. The survey was placed on different social networks (www.roda.hr & www.forum.hr) in the Croatian language and the participation in the survey was voluntary and anonymous with the note that women with experience in childbirth were participating. A survey of 14 questions with the offered answers was used in the survey. One hundred and twelve (112) respondents participated in the survey. Before processing the data in order to evaluate the results of the survey, assessment was made as to how representative the sample was, and whether it was possible to obtain concrete results based on the obtained sample.

## RESULTS

Most respondents (71.43%) were of the age of 26-35; 12.50% respondents were of the age between 18 and 25 and 16.07% were aged 36 and over. Most of the participants had had the first childbirth (57.14%), 32.14% of mothers had had the second childbirth, and 10.71% of them had had a third or more. Childbirth was mostly vaginal (83.04%), only 16.96% had had a Caesarean section. Most women (78.57%) did not fear a new childbirth. According to the occurrence of psychic changes after childbirth, even 29.46% of mothers answered that they did not hear about the possibility of psychological changes. The most common information source was the internet (59.82%), followed by information from a specialist (16.96%) and experience of a close person (12.50%). 10.71% of mothers did not receive information on psychological problems and disorders. In response to the presence of a partner during the delivery of the child, 61.61% of women responded that the partner was present. After delivery, most women (91.07%) had some form of support. The most frequent support came from family and friends (41.07%), then only the family (30.36%) and only the partner (19.64%). Most of the mothers (55.36%) did not have any difficulty, while the most common type of problems was Baby blues (25.00%). Other psychological changes were represented in a small percentage. Of the 50 participants experiencing some form of mental disturbance, most (23.21%) experienced changes immediately after delivery, 14.29% experienced change 2 weeks after, and 1-3 months after childbirth in 8.04% of women. Results have been shown in Figure 1.

The duration of mental difficulties/changes was variable; 16.07% of women answered that the duration was 1-3 months, for 15.8% participants the duration was less than a month, 3.57% of the participants had symptoms from 3 to 6 months, while in 10.71 % of women changes lasted longer than 6 months; results are shown in Figure 2.

Most mothers (74.11%) had support during pregnancy, delivery and postpartum period, but 18.75% answered that they had no support. 7.14% of participants did not know if they had any support. The number of community nurse visits was satisfactory. There were one to three visits after childbirth (61.61%), four and more visits (36.61%), while a very small percentage of mothers (1.79%) answered they did not have a single visit. It is noted that more than 50% were satisfied (55.36%), while (34.82%) were partially satisfied, and 9.82% were not at all satisfied with the information they got. 44.64% of the families did not receive enough information.

Out of a total of 112 women responding to the survey, 50 of them have had some kind of mental difficulties/disorder. 35.71% of them at the age of 18-25 years had experienced some kind of psychological change. This percentage is 46.25% for women aged 26-35 and 44.44% for women older than 36 years. Figure 3 shows the distribution of psychological changes by age groups.

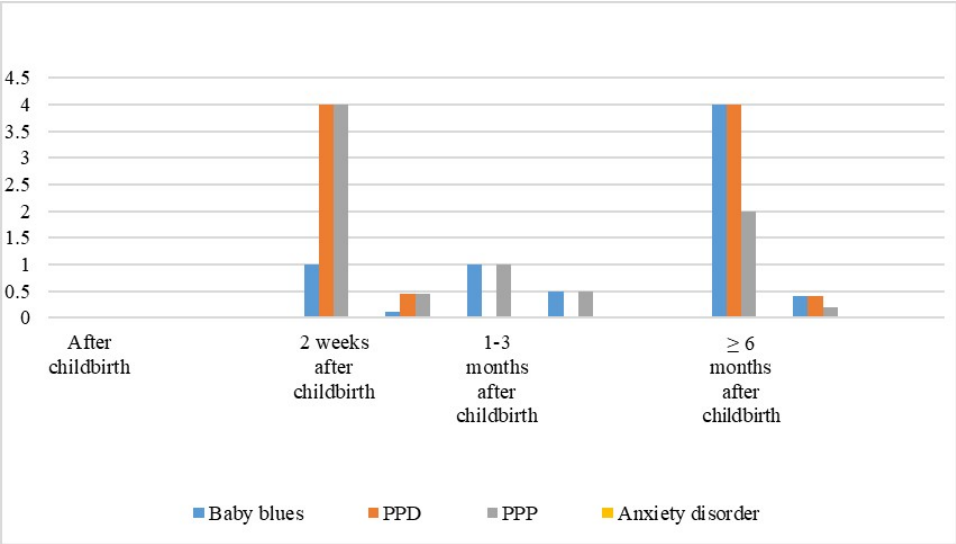


**Figure 1.** Percentage of psychological changes according to the beginning of the symptoms

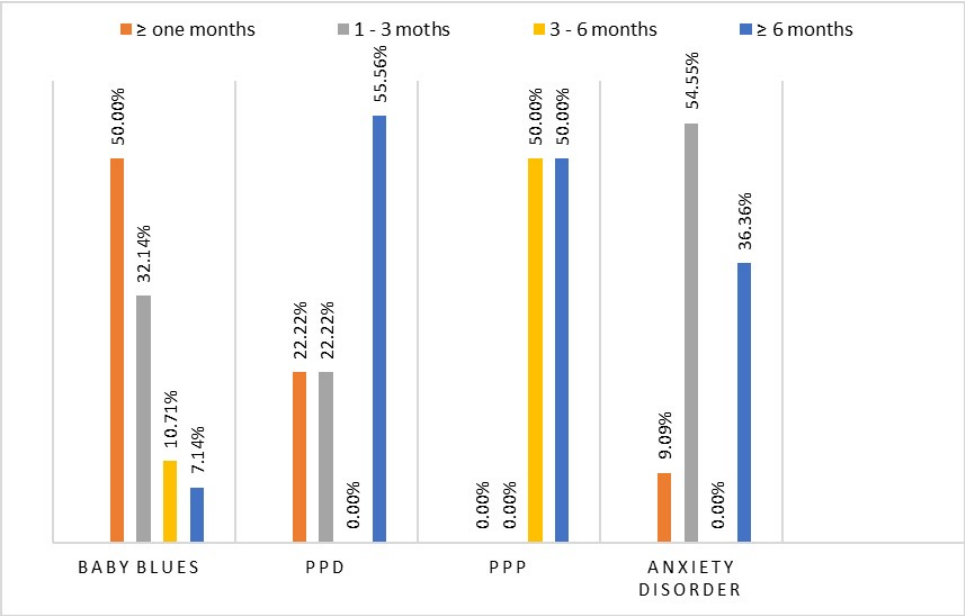


**Figure 2.** Percentage of psychological changes according to duration of the symptoms

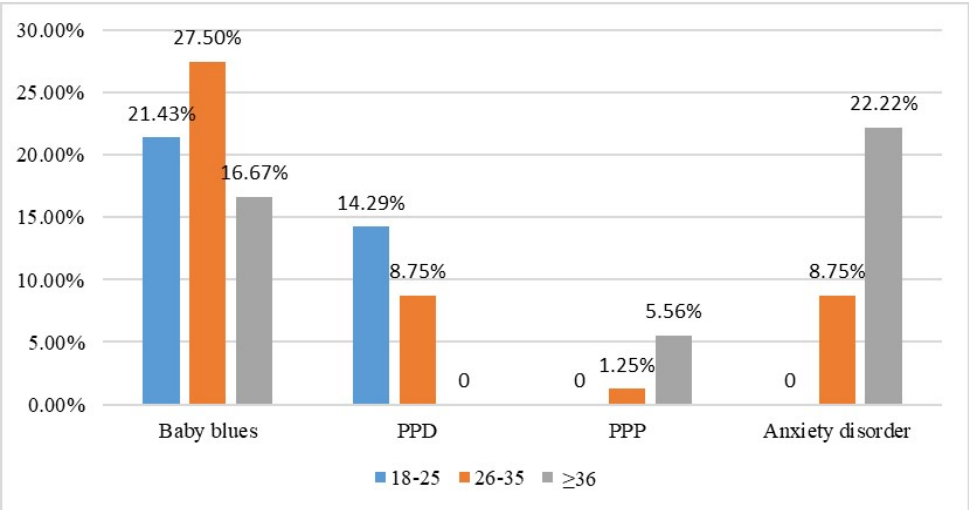


**Figure 3.** Percentage of psychological changes by age

The Baby blues is present in all age groups, but it is most common in women between the ages of 26-35 and 18-25. Women older than 36 have the smallest appearance of Baby blues. PPD is commonly reported in 18-25 age in 14.29% of patients, while at age 26-35 it is 8.75%. The results have shown that PPP appears at age 36 and older (5.56%), at 26-35 years of age the percentage is extremely small, only 1.25%, while at the age of 18-25 it did not at all appear. Results for PPP should be observed with reserve, since only two participants responded positively about this disorder, so the sample is not large enough.

Anxiety disorder occurs at the highest percentage at the age of 36 and older (22.22%), and this is the most common disorder occurring at that age, while in group 26-35 years its likelihood of appearing falls to 8.75%, and in the group aged 18 to 25 years it does not appear at all. According to the way of childbirth and psychological difficulties, the results have shown that 46.24% women who had vaginal childbirth have problems, and 36.84% of those who have had a Caesarean section - as we can see in Figure 4.

34.38% of mothers with first childbirth had Baby blues while in mothers who had second childbirth this percentage was 16.67%. In participants who had three or more childbirths, Baby blues were not recorded. PPD also did not appear in mothers who have had three or more childbirths, while in mothers with second births the highest percentage of occurrence is 13.89% while in first births it is 6.25%. PPP was only reported in 3.13% in mothers with first childbirth, while in mothers with second or more childbirth it was not recorded. The results are shown in Figure 5.

Fear of new childbirth in mothers who have experienced psychiatric difficulties occurred in 26% of participants. Responding to the survey, 48.1% of women with difficulty/disorder responded that before childbirth they were informed about the potential psychological changes, while 27.91% of respondents did not know about this possibility. A large number of mothers with psychological changes had found information over the internet (50.75%). Information obtained from experienced persons was received by 42.86% of mothers, and the percentage of mothers who did not have information was 38.46%. The lowest incidence of changes was in mothers who received information through a specialist, that is 27.78%, which is certainly positive.

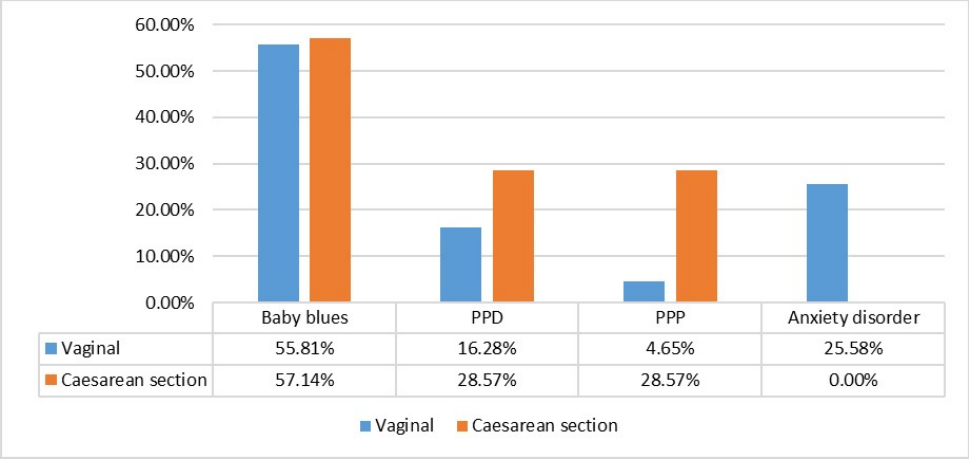


**Figure 4.** Percentage of psychological changes according to the way of childbirth

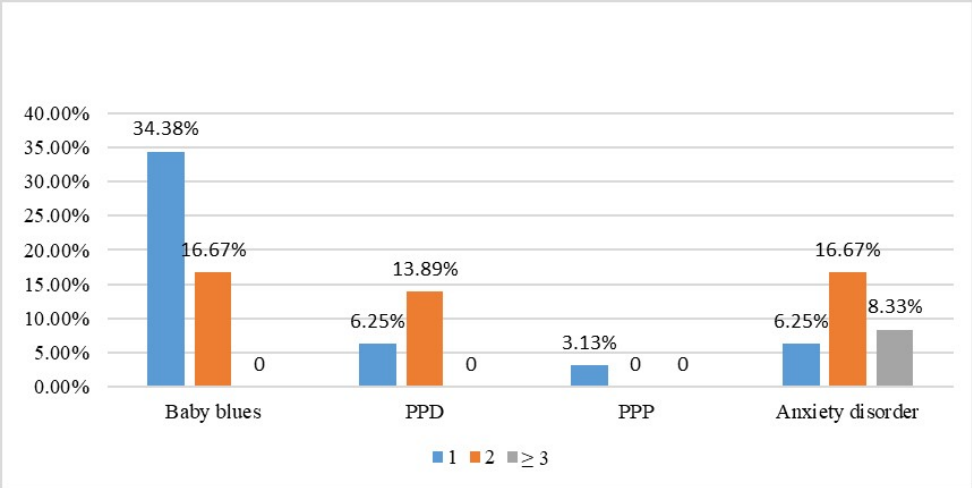


**Figure 5.** Percentage of psychological changes by the number of births

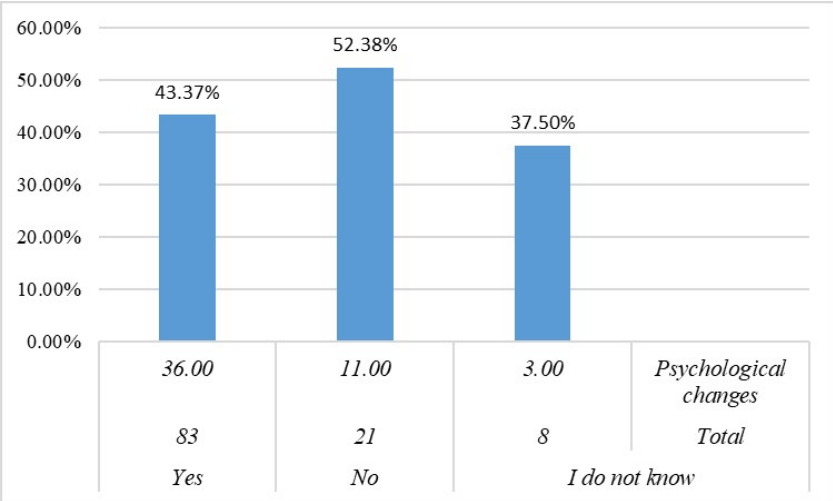


**Figure 6.** Percentage of psychological changes according to pregnancy support

Most mothers were under great stress when they arrived at the hospital, so the role of medical staff is very important. Figure 6 shows the assessment of the support of medical staff in the hospital before and after delivery. Mothers who did not have support before delivery had some form of mental problems (52.38%). Mothers with support had slightly less psychological problems, 43.37%, while mothers with undefined support had the lowest percentage of psychological changes (37.5%). Among women who were not satisfied with community nurse and information received, 63.64% developed psychological changes, this percentage reduced to 51.28% in women who were at least partially satisfied with the information they had received. Of those participants who were completely satisfied with the information, only 37.10% developed some form of mental problems.

## DISCUSSION

Results of the research has shown that 54.46% of participants did not have any psychological changes in the postpartum period. Of the 45,54% of the participants reporting psychological difficulties, 25% of them have had the slightest changes or Baby blues which is, according to Misri & Burgman (1992) usually present in women after delivery and often start on the third day after childbirth. Although, according to numerous researches after the childbirth psychological changes tend to be at younger women, our results were recorded at an approximate percent in all three age groups, with the smallest percentage of change (35.71%) present in women of the youngest age. PPD is commonly reported in the 18-25 age group (14.29%) similarly to previous research (Misri & Burgman 1992, Upadhyay et al. 2017, Vismara et al. 2016). Results have shown that changes are more present after first childbirth than at next one which can be related to the previous experience of motherhood as shown by Vismara (2016) and Upadhyay (2017). Also, results have shown that women with support have less psychological changes that unsupported women as confirmed by others researches (Goyal et al. 2010, Veisani et al. 2013, Goyal et al. 2010, Veisani et al. 2013, Mezzacappa & Katkin 2002, Thome et al. 2006, Saligheh et al. 2017). The limitation of our research is the lack of information on socioeconomic status and education so we could not compare these segments with previous research. Also, PPD and PPP results should be taken with caution as there was no information on the existence of psychological changes in family history or information that would clarify the answers obtained. Our results only collected the responses of mothers who spoke the Croatian language, so this could present a small part of women at a certain point in life. The most common way of collecting information is the internet (59.82%), followed by information from experts (16.96%) and persons with experience (12.50%). The lowest incidence of changes was in mothers who received information through a specialist, in percentage 27.78%, which is certainly positive. The source of information can have an impact on timely and quality information that a mother should get in this period, so emphasis should be placed on professionals, doctors and nurses as well as psychologists who might be supportive in preventing/reducing psychological difficulties. The result of Croatian sample is not only because of the language barrier, but Croatian women who use the internet also do not get particular information because they are not familiar with the English language and there is not enough professional information available in the Croatian language on the internet. After the childbirth, most women in our research (91.07%) had some form of support that should impact the lower incidence of psychological changes. The most frequent support has come from family and friends (41.07%), then only from the family (30.36%) and finally only from the partner (19.64%), confirming the results that social support as well as performing various activities in the family could prevent psychological problems (Slomian et al. 2017, Thome et

al. 2006, Saligheh et al. 2017). Pregnant mothers had some type of mental problems (52.38%) indicating that prevention of these conditions should begin during pregnancy, especially in pregnancy courses. In women who developed these changes, the highest percentage (23.21%) occurred immediately after delivery and two weeks to one month after delivery as confirmed by the other results (Takahashi & Tamakoshi 2016, Gupta et al. 2013, Veisani et al. 2013). According to the duration of the symptoms, the highest percentage of responses was that duration was 1-3 months, and at 15.8% duration was less than one month. This is the time when a mother establishes an emotional relationship with a new-born baby, the time of adopting maternity and all the obligations that follow, so this may lead to a weaker adaptation, as shown by previous research (Mantisa et al. 2019, Fiala et al. 2017). Providing support to all mothers during this period to adapt to maternity and prevent unwanted situations is necessary. According to other studies adequate preparation of pregnant women for motherhood, breastfeeding, social support, mental training, light therapy, some dietary supplements and aromatherapy may influence the prevention of psychological changes or the reduction of difficulties (Thome et al. 2006, Sheydaei et al. 2017, Saligheh et al. 2017, Vismara et al. 2016, Asazawa et al. 2017, Potharst et al. 2017, Crowely et al. 2012, Olaoluwa et al. 2019).

## CONCLUSION

Results of the research have shown that more than 50% of participants did not have any psychological changes in the postpartum period. Of the 45.54% participants reporting psychological difficulties, 25% of them have had the slightest changes or Baby blues. Most women (91.07%) had some form of support during and after pregnancy which should impact the lower incidence of psychological changes. Anxiety is more present after 36 age (22.22%) and could be connected with facing reality and problems of life, especially for those women who have more than two children. The lowest incidence of changes was in mothers who received information through a specialist, in percentage 27.78%, which is certainly positive. Preparation for maternity using a different technique, such as a pregnancy course, counselling, education is important for the future mother. According to assessment, it is necessary to use an adequate, valid scale for risk groups of women, especially for those with a positive family history (Mari et al. 2013, Horowitz et al. 2103, Werner et al. 2015). Mental difficulties/disorders in the postpartum period are one of the most common problems facing mothers. They can be relatively mild, such as Baby blues, or dangerous to the life of a mother and a child, such as psychosis. Each of them affects the quality of life of mother, child, and family, so it is important to have effective prevention and treatment.

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***Conflict of interest:*** *None to declare.*

***Contribution of individual authors:***

Ivana Zivoder: design of the study, literature searches and analyses, interpretation of data, manuscript writing.

Sanja Martic-Biocina: design of the study, recruitment and collection of data, statistical analyses, manuscript writing.

Jurica Veronek: recruitment and collection of data, statistical analyses, writing of the report.

Natalija Ursulin-Trstenjak: literature searches and analyses, interpretation of data, writing of the report.

Melita Sajko & Marija Paukovic: interpretation of data, statistical analyses, writing of the report.

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