



# EFFECT OF FAMILY SIZE AND PLACE OF RESIDENCE ON SEXUAL ACTIVITY RESUMPTION IN WOMEN AFTER CHILDBIRTH

Zorica Knezović Drakšić<sup>1</sup>, Hrvojka Soljačić-Vraneš<sup>1</sup>, Ivka Djaković<sup>2</sup> and Hrvoje Vraneš<sup>3</sup>

<sup>1</sup>Department of Gynecology and Obstetrics, Sestre milosrdnice University Hospital Center, Zagreb, Croatia;

<sup>2</sup>Department of Gynecology, Bethesda Hospital, Basel, Switzerland;

<sup>3</sup>University of Zagreb, School of Medicine, Zagreb, Croatia

**SUMMARY** – The aim of this study was to assess the effect of social factors such as living in rural *versus* urban area or in an extended *versus* nuclear family regarding female sexuality in the postpartum period. In this cross-sectional study 113 women took part. They filled-out a questionnaire that contained sociodemographic questions about their marital status, place of residence, number of family members, and questions about sexual intercourses after giving birth. They were also asked about the frequency, time elapsed until resuming sexual intercourse, and presence of dyspareunia. Time period from giving birth until resuming sexual intercourse was 8 weeks on average. Place of residence (median test:  $\chi^2(2)=3.3$ ,  $p>0.05$ ) and number of household members (median test:  $\chi^2(4)=0.87$ ,  $p>0.05$  for number of household members) had no effect on that time period. There was no significant difference in the frequency of sexual intercourse between women living in urban and rural area ( $\chi^2$ -test(1)=0.03,  $p>0.05$ ). Women in larger families were more sexually active in comparison to women in smaller families ( $\chi^2$ -test(2)=9.08,  $p<0.05$ ). Dyspareunia was reported by 41.3% of study women. Sexuality of women in the postpartum period is liable to social effects. Social support of family members has a greater impact on sexuality in the postpartum period than other social factors such as place of residence. Besides support of close family members, women in that period should have organized social protection and access to information.

**Key words:** *Support, social; Period, postpartum; Intercourse, sexual*

## Introduction

Despite the fact that sexuality is an integral and essential part of everyday life, women still find it extremely difficult to openly talk about it, especially after giving birth. According to the World Health Organization, sexual health is "... a state of physical,

emotional, mental and social well-being in relation to sexuality; it is not merely the absence of disease, dysfunction or infirmity"<sup>1</sup>.

Postpartum sexuality is influenced by biological, psychological, and social changes which happened in the period after giving birth. According to the literature, sexual function declines during pregnancy and postpartum period. Prevalence rates of sexual dysfunction vary from 41% to 83% in the first 3 months after delivery and 18%-30% of postpartum women still complain experiencing sexual problems at 6 months after delivery<sup>1-6</sup>.

Correspondence to: Zorica Knezović Drakšić, MD, Department of Gynecology and Obstetrics, Sestre milosrdnice University Hospital Center, Vinogradska c. 29, HR-10000 Zagreb, Croatia  
E-mail: zoricaknezovic90@gmail.com

Received January 31, 2021, accepted April 13, 2023

Vaginal bleeding, perineal trauma, lack of vaginal lubrication, difficulty to reach orgasm, loss of sexual desire, and changes in family structure are some of the causes of postpartum sexual dysfunction<sup>5,6</sup>.

Studies of female sexuality in the postpartum period are mainly based on the implication of anatomical changes on sexual function after giving birth. Lack of studies on female sexuality, especially on postpartum sexuality, encouraged us to embark upon this research. The aim of this study was to examine sociodemographic factors such as living in a rural or urban area, in an extended or nuclear family, and marital status on sexual activity in women after childbirth.

## Material and Methods

### *Patients and study design*

This was a cross-sectional study approved by the Hospital Board of Ethics of the Sestre milosrdnice University Hospital Center, Zagreb. The study was conducted at the Department of Gynecology and Obstetrics, Sestre milosrdnice University Hospital Center, Zagreb, Croatia from August 1 to September 12, 2016. Study participants were secundigravidae who were followed up and gave birth at our hospital. The inclusion criteria were: secundigravidae, and women from the City of Zagreb, satellite towns around Zagreb, and women from the Zagreb County countryside.

### *Methods*

We designed a questionnaire with questions about sociodemographic characteristics such as place of residence, number of family members, marital status, and questions about sexual activities and satisfaction in the postpartum period. Women filled-out the questionnaire anonymously in the waiting room before appointment in our antenatal care clinic or in delivery room before elective induction of labor. They were informed that if they did not fill-out the questionnaire, it would not affect the way they would be treated.

According to the place of residence, women were divided into two categories, i.e., women from rural and urban areas. We used official administrative definitions of urban and rural areas. According to the act on local and regional self-government, urban area or town is a unit of local self-government where the seat of the county is located, as well as any other place with more

than 10,000 inhabitants, and which represents an urban, historical, natural, economic, and social whole. Cities were divided in two categories, i.e., cities with less than 100,000 inhabitants and cities with more than 100,000 inhabitants. Marital status was divided into married, single, and women who lived in cohabitation. Completed questionnaires were left in boxes in front of the clinic and delivery room.

### *Statistical analysis*

The  $\chi^2$ -test was used to analyze collected data on the impact of the place of residence and number of family members on the frequency of sexual relations in the first year and the time elapsed from giving birth until resuming sexual relations.

## Results

During the period of data collection, 293 women gave birth at our hospital, of which 121 met the inclusion criteria described above, six of them declined to take the questionnaire, and two of them returned the questionnaire with invalid data. Total study sample consisted of 113 women, meaning that 93.5% of women who met the inclusion criteria gave valid responses and were included in the analysis.

The mean age of study women was 29.9 (SD=4.1) years. Most women were from urban area. More precisely, 25 women were from the countryside, 27 from the cities with less than 100,000 inhabitants, and 61 from the cities with 100,000 or more inhabitants, or as defined above, 77.87% lived in urban and 22.13% in rural areas.

Before pregnancy, 9.8% of the respondents did not live with a partner, while 21.2% lived in cohabitation, and 69.0% in marriage. After giving birth, 2.7% of the respondents lived alone, 69% with a partner and a child, and 28.3% with a partner, child and other family members.

Of the 113 women who completed the questionnaire, 109 (96.46%) women resumed sexual activity in the first year after childbirth. Of these, 41.3% reported dyspareunia.

Difference in the place of residence had no effect on the time elapsed from delivery until resumption of sexual relations (median test:  $\chi^2(2)=3.3$ ,  $p>0.05$ ) (Fig. 1).

There was no difference in the frequency of sexual relations in the first year after childbirth according

to the place of residence either ( $\chi^2$ -test:  $\chi^2(1)=0.03$ ,  $p>0.05$ ) (Fig. 2).

Number of family members did not influence the time of resuming sexual relations, but it did affect

the frequency of sexual relations ( $\chi^2$ -test:  $\chi^2(2)=9.08$ ,  $p<0.05$ ) (Fig. 3, Table 1).

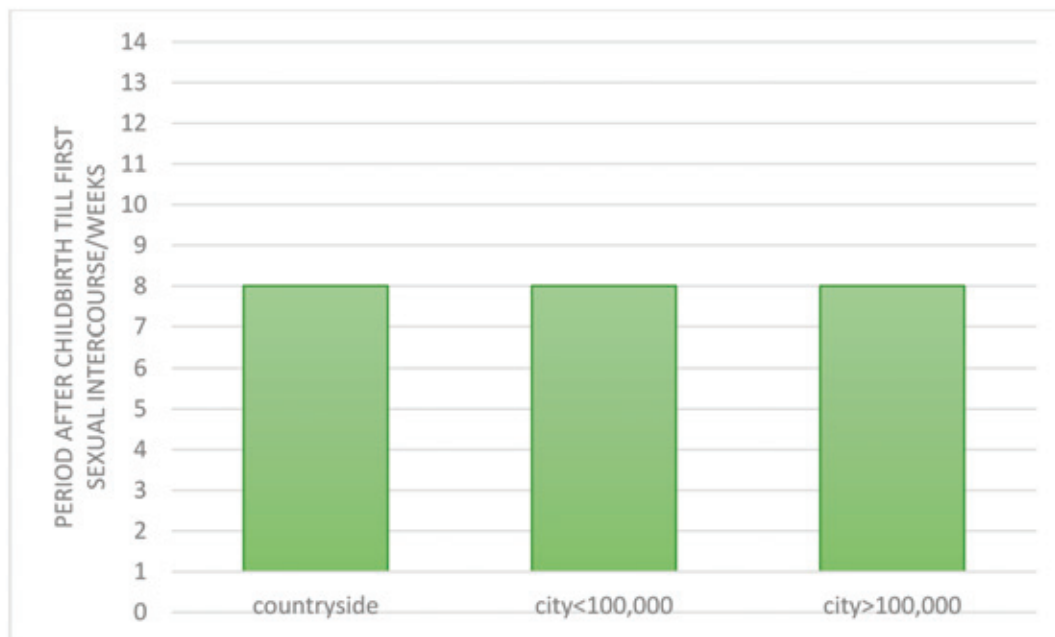


Fig. 1. Place of residence and time (weeks) after childbirth until the first sexual intercourse.

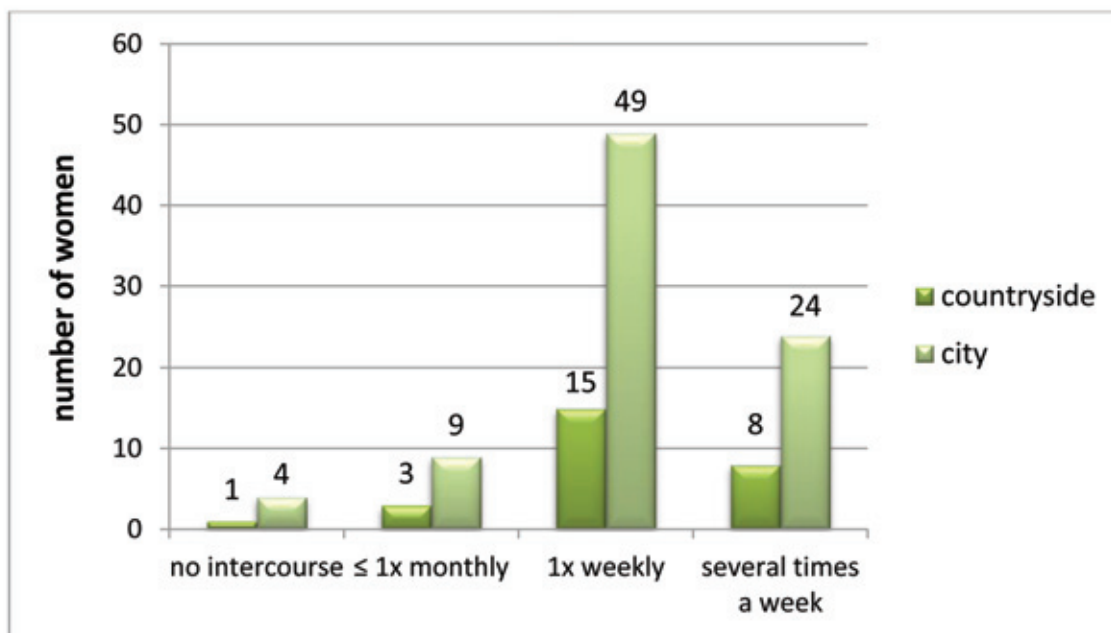


Fig. 2. Frequency of sexual intercourse during the first year after childbirth according to the place of residence.

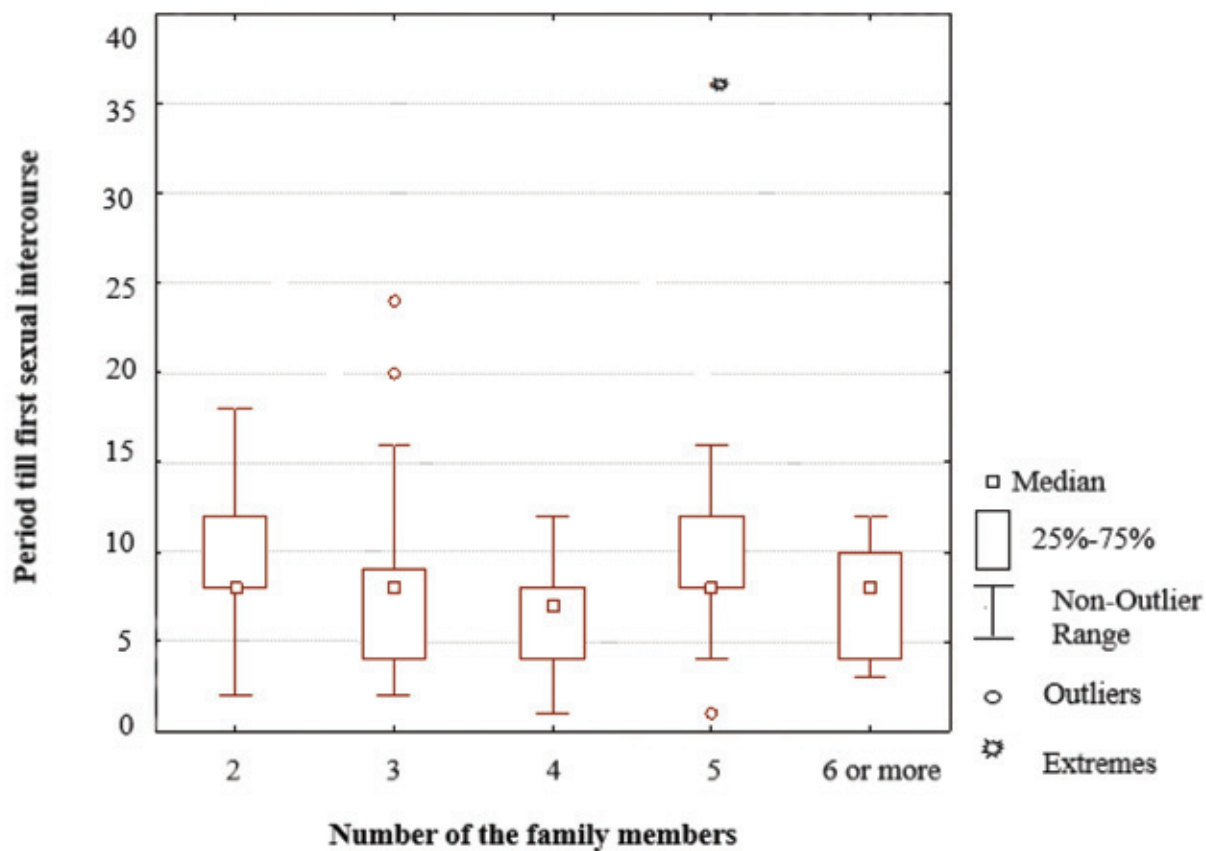


Fig. 3. Impact of the number of family members on the time elapsed between childbirth and first sexual intercourse.

Table 1. Relation between the number of family members and frequency of sexual relations

|                               | Number of family members |    |
|-------------------------------|--------------------------|----|
|                               | 2-4                      | ≥5 |
| Frequency of sexual relations | Number of participants   |    |
| 0-1                           | 10                       | 5  |
| 2                             | 55                       | 10 |
| 3                             | 17                       | 13 |

## Discussion

Sexual function of women after childbirth has complex etiology, and several factors such as hormonal changes, pelvic floor dysfunction, vaginal dryness, mode of delivery, breastfeeding, cultural, social and ethnic issues have implications on it<sup>7,8</sup>. Our study results showed the time elapsed from giving birth to the first sexual intercourse was 8 weeks. Previous research found that most of women were sexually active 6 weeks after giving birth, and 95% of them had sexual relations after six months<sup>9,10</sup>.

First medical examination after vaginal delivery is recommended at 6 weeks<sup>11</sup> and after cesarean section at 8 weeks. It can be assumed that most women wait for medical examination before resuming sexual intercourses. This is supported by the results which show that there was no difference between women living in urban and rural areas, or between women living in a large family as compared to those living in smaller families.

According to the literature available, there are no official recommendations when women should have the first sexual intercourse after giving birth. If a woman having given birth feels comfortable and has sexual desire, sexual relation can occur two weeks after giving birth<sup>5,12</sup>.

Some research indicates that sexual desire appears much earlier than sexual activity resumption and that women are more prone to other types of sexual activities before vaginal intercourse, independently of the mode of delivery. It is obvious that besides physical changes, social aspects affect sexual activity after birth as well<sup>13-17</sup>.

In the Republic of Croatia, rural population reaches 44%-48%, depending on the definition of rural area<sup>18</sup>. There is a disparity in the lifestyle and quality of life between urban and rural areas. For example, rural population in the Republic of Croatia are less educated. The proportion of the population with high education is much bigger in urban areas; for example, in Zagreb it reaches 30.6%, whereas in whole Croatia it reaches 17.6% of the population<sup>19</sup>. Besides education, monthly income, lower employment rate, lower infrastructure of rural area, and family lifestyle also differ between urban and rural areas.

Families in rural areas are often extended with three generations living together, unlike families in urban areas where families often are nuclear<sup>20</sup>. Satisfaction with the quality of family life is much higher in rural

areas because of stronger social connections, mutual solidarity, and feeling of belonging<sup>20</sup>, which is very important in new situations such as childbirth. Urban areas are more characterized with greater availability of social counseling, where these new mothers can be informed and find support.

Due to the lack of research about women's quality of life and satisfaction after giving birth, we can only presume the cause of these results. The lack of a physician-woman communication, as well as the lack of defined recommendations play a significant role. Social expectations, where a mother should dedicate her life exclusively to raise a child, proves the fact that the Republic of Croatia is still mostly a conservative country. The fact is that the topic of female sexual needs is so rarely spoken about, which may also explain the results of this study. The increase of sexual intercourse frequency, together with increase in the number of family members support the information from the introduction section. In bigger families, we find greater social support and people are generally more satisfied with the family life. All this led us to a conclusion that it is necessary to encourage social awareness of the needs of women that gave birth, and to make consultation and support in the postpartum period available to them.

## References

1. World Health Organization. Sexual health, human rights and the law. Geneva, Switzerland: WHO Press; 2015.
2. Cunningham GF, Leveno KJ, Bloom SL, Spong CY, Dashe SJ, Hofman BL, Casey BM. The puerperium. In: Williams Obstetrics. Mc Graw Hill Education, 2014; p. 678.
3. Kahramanoglu I, Baktiroglu M, Hamzaoglu K, Kahramanoglu O, Verit FF, Yucel O. The impact of mode of delivery on the sexual function of primiparous women: a prospective study. *Arch Gynecol Obstet.* 2017 Apr;295(4):907-16. doi: 10.1007/s00404-017-4299-7
4. Sheikhi ZP, Navidian A, Rigi M. Effect of sexual health education on sexual function and resumption of sexual intercourse after childbirth in primiparous women. *J Educ Health Promot.* 2020 Apr 28;9:87. doi: 10.4103/jehp.jehp\_591\_19
5. Mekonnen BD. Factors associated with early resumption of sexual intercourse among women during extended postpartum period in northwest Ethiopia: a cross sectional study. *Contracept Reprod Med.* 2020 Nov 2;5(1):19. doi: 10.1186/s40834-020-00124-7
6. O'Malley D, Higgins A, Begley C, Daly D, Smith V. Prevalence of and risk factors associated with sexual health issues in primiparous women at 6 and 12 months postpartum; a longitudinal prospective cohort study (the MAMMI study). *BMC Pregnancy Childbirth.* 2018 May 31;18(1):196. doi: 10.1186/s12884-018-1838-6



7. Carlander AK, Andolf E, Edman G, Wiklund I. Health-related quality of life five years after birth of the first child. *Sex Reprod Healthc.* 2015 Jun;6(2):101-7. doi: 10.1016/j.srhc.2015.01.005
8. Handelzalts JE, Levy S, Peled Y, Yadid L, Goldzweig G. Mode of delivery, childbirth experience and postpartum sexuality. *Arch Gynecol Obstet.* 2018 Apr;297(4):927-32. doi: 10.1007/s00404-018-4693-9
9. Cappel J, Pukall CF. Perceptions of the effects of childbirth on sexuality among nulliparous individuals. *Birth.* 2018 Mar;45(1):55-63. doi: 10.1111/birt.12321
10. Pastore L, Owens A, Raymond C. Postpartum sexuality concerns among first-time parents from one U.S. academic hospital. *J Sex Med.* 2007 Jan;4(1):115-23. doi: 10.1111/j.1743-6109.2006.00379.x
11. WHO Recommendations on Postnatal Care of the Mother and Newborn. Geneva: World Health Organization; 2013 Oct.
12. Tavares IM, Schlagintweit HE, Nobre PJ, Rosen NO. Sexual well-being and perceived stress in couples transitioning to parenthood: a dyadic analysis. *Int J Clin Health Psychol.* 2019 Sep;19(3):198-208. doi: 10.1016/j.ijchp.2019.07.004
13. Heinemann J, Atallah S, Rosenbaum T. The impact of culture and ethnicity on sexuality and sexual function. *Curr Sex Health Rep.* 2016;8:144-50. doi: 10.1007/s11930-016-0088-8
14. Cappel J, Bouchard KN, Chamberlain SM, Byers-Heinlein A, Chivers ML, Pukall CF. Is mode of delivery associated with sexual response? A pilot study of genital and subjective sexual arousal in primiparous women with vaginal or cesarean section births. *J Sex Med.* 2020 Feb;17(2):257-72. doi: 10.1016/j.jsxm.2019.11.264
15. Doke PP, Vaidya VM, Narula APS, Patil AV, Panchanadikar TM, Wagh GN. Risk of non-resumption of vaginal sex and dyspareunia among cesarean-delivered women. *J Family Med Prim Care.* 2021 Jul;10(7):2600-7. doi: 10.4103/jfmpc.jfmpc\_2482\_20
16. Triviño-Juárez JM, Romero-Ayuso D, Nieto-Pereda B, Forjaz MJ, Oliver-Barrecheguren C, Mellizo-Díaz S, Avilés-Gámez B, Arruti-Sevilla B, Criado-Álvarez JJ, Soto-Lucía C, Plá-Mestre R. Resumption of intercourse, self-reported decline in sexual intercourse and dyspareunia in women by mode of birth: a prospective follow-up study. *J Adv Nurs.* 2018 Mar;74(3):637-50. doi: 10.1111/jan.13468
17. Pardell-Dominguez L, Palmieri PA, Dominguez-Cancino KA, Camacho-Rodriguez DE, Edwards JE, Watson J, Leyva-Moral JM. The meaning of postpartum sexual health for women living in Spain: a phenomenological inquiry. *BMC Pregnancy Childbirth.* 2021 Jan 28;21(1):92. doi: 10.1186/s12884-021-03578-y
18. Miljenović A, Blažeka Kokorić S, Berc G. Kvaliteta života obitelji na različitim ruralnim područjima: primjer četiriju općina Sisačkomoslavačke županije. (Quality of life of families in different rural areas: the example of four municipalities of Sisak-Moslavina County). *Sociologija i prostor.* 2016;54(1 (204)):19-44. (in Croatian) doi: 10.5673/sip.54.1.2
19. Vinković D. Obrazovna struktura hrvatskih općina i gradova (Educational structure of Croatian municipalities and cities). Science and Society Synergy Institute. <http://iszd.hr/obrazovna-struktura-hrvatskih-opcina-i-gradova/> (Sep 8, 2021) (in Croatian)
20. Šućur Z. Objektivno i subjektivno siromaštvo u Hrvatskoj. *Revija za socijalnu politiku* [Internet]. 2006;13(3-4):237-55. doi: 10.3935/rsp.v13i3.410. (in Croatian)

### Sažetak

## UTJECAJ VELIČINE OBITELJI TE MJESTA STANOVANJA NA PONOVRNU SEKSUALNU AKTIVNOST ŽENE NAKON POROĐAJA

Z. Knezović Drakšić, H. Soljačić-Vraneš, I. Djaković i H. Vraneš

Cilj ovog istraživanja bio je procjena utjecaja društvenih čimbenika poput života u ruralnom naspram urbanom području te življenja u proširenoj naspram nuklearnoj obitelji na seksualnost žene u postporođajnom dobu. U ovom presječnom istraživanju sudjelovalo je 113 žena. Ispunjavale su upitnik koji je sadržavao sociodemografska pitanja o bračnom statusu, mjestu stanovanja, broju članova obitelji te pitanja o spolnim odnosima nakon porođaja. Usto ispitane su o učestalosti spolnih odnosa, vremenu proteklom do prvog spolnog odnosa te prisutnosti dispareunije. Razdoblje od porođaja do prvog spolnog odnosa u prosjeku je iznosilo 8 tjedana. Mjesto stanovanja (median test:  $\chi^2(2)=3,3$ ,  $p>0,05$ ) i broj članova kućanstva (median test:  $\chi^2(4)=0,87$ ,  $p>0,05$  za broj članova kućanstva) nisu imali utjecaja na to razdoblje. Nije bilo značajne razlike u učestalosti spolnih odnosa između žena koje žive u urbanim naspram žena koje žive u ruralnim područjima ( $\chi^2$ -test(1)=0,03,  $p>0,05$ ). Žene u većim obiteljima bile su seksualno aktivnije u odnosu na žene u manjim obiteljima ( $\chi^2$ -test(2)=9,08,  $p<0,05$ ). Dispareuniju je prijavilo 41,3% ispitanica. Seksualnost žena u postporođajnom razdoblju podložna je društvenim utjecajima. Društvena potpora članova obitelji ima veći utjecaj na seksualnost u postporođajnom razdoblju nego drugi društveni čimbenici poput mjesta stanovanja. Uz potporu članova uže obitelji žene bi u tom razdoblju trebale imati organiziranu socijalnu zaštitu te bolji pristup informacijama.

Ključne riječi: *Socijalna potpora; Postporođajno razdoblje; Spolni odnos*