ORIGINAL ARTICLE

POSTPARTUM PAIN

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Abstract

Introduction: Delivery and postpartum pain is individually experienced by each woman. Many women can feel a more intensive pain the first time they feel it, but they cannot know how they will react to it. One of the roles of a midwife is to care for a woman with such pain. This article deals with research regarding delivery and postpartum pain that was carried out in obstetrics departments in the South Bohemian Region.

Goal: The research objective was to map the intensity of postpartum pain (which depends on the women's age and the number of deliveries), to find out what organ was affected by postpartum pain and whether women were informed about the pain.

Materials and methods: The research was carried out using the quantitative method of a non-standardized questionnaire and the standardized questionnaire of PCS (The Pain Catastrophizing Scale).The sample group consisted of 635 respondents who had experienced vaginal delivery.

Results: 74.3% of women stated postpartum pain. They assessed the pain using VAS (visual analogue scale). 36.5% experienced mild pain, 44.1% experienced moderate pain and 19.4% experienced severe pain. The older the women were, the higher the percentage of those who experienced pain was. Younger women (up to 25 years) considered the pain to be greater. It was statistically proven that age and the organ affected by postpartum pain were connected. The youngest women (up to 25 years) significantly more frequently stated that the postpartum pain was caused by episiotomy. The older the women were, the higher the percentage of those who stated that their postpartum pain was caused by the involution of the uterus. Most frequently, postpartum pain was in the place of the carried out episiotomy or the cause was the involution of the uterus or the women had backache.

Conclusion: For quality care in midwifery, the assessment of pain is important, as well as the education of women on the reasons for such pain and the options for decreasing it. Midwives should focus especially on younger women, whose pain is associated with episiotomy.

Keywords: *delivery and postpartum pain; decreasing/easing pain; midwife; woman*

INTRODUCTION

Delivery is one of the most significant experiences in life. Midwives should understand the pain during delivery, including its physiological and psychological impact, and offer women convenient methods in how to ease this pain. These can be pharmacological and non-pharmacological (Bonapace et al. 2018).

The definition of the birth of a live foetus is its full evulsion or egestion when the duration of gravidity is not taken into consideration. The foetus breathes or it shows at least one sign of life after birth, e.g. cardiac activity, the pulsation of the funicle or an undisputed movement of skeletal muscles regardless of cutting off the funicle or attaching the placenta (Hájek et al. 2014). A stillborn foetus is characterized by the absence of signs of life. It weighs 500g and more or the doctor is not able to determine the birth weight after the 22nd week of pregnancy or the duration of pregnancy when the doctor determines that the length of the foetus from head to heel is at least 25 cm (Act No. 372/2011 Col., Hájek et al. 2014). It is clear that the definition of birth is the termination of pregnancy, when the weight of the foetus is equal to or higher than 500 g, regardless of whether the foetus is alive or dead (Hájek et al. 2014).

The starting mechanisms of a delivery have not been clarified yet. There are a number of factors that start a delivery (Leifer 2004). This starting process is gradual and not sudden. A woman may be in labour for hours before the delivery starts and a delivery may vary in duration (Binder et al. 2011).

A delivery has three phases: the first phase is called opening, the second is egesting and the third is the period in bed (Pařízek 2015). Roztočil et al. (2008), Macků (1996), Eliašová (2008) or Hájek et al. (2014) add the postpartum period as the fourth phase.

Roztočil et al. (2008) describe the fourth phase as puerperium. It lasts for 6–12 weeks after delivery. Early puerperium also includes two hours after delivery. During this period, a woman's organism experiences changes caused by the involution oh the uterus, which are associated with the duration of lactation and breastfeeding frequency (Roztočil et al. 2008). In puerperium, the delivery wounds are healed. These wounds can be caused by episiotomy or ruptures (Pařízek 2015).

In relation to postpartum pain, it is necessary to mention the perineal delivery wound or episiotomy. Episiotomy (cutting the perineal area) is frequently carried out during vaginal deliveries, but recently women have been refusing it, which is a requirement stated in their delivery plan (Takács et al. 2015). Other types of postpartum pain include the pain during the involution of the uterus, backache, headache or lactation-caused breast pain.

The goal of this research was to map the intensity of postpartum pain, which depends on the women's age, the number of deliveries, attending a prenatal course and whether a woman is generally satisfied.

MATERIALS AND METHODS

The research group included 635 women. They filled in a questionnaire on the 3rd day after vaginal delivery. 20.3% of women were up to 25 years old (20.3%), 61.6% were between 26 and 34, and 17.5% were 35 and older. 43% were pregnant for the first time, 38.1% were pregnant for the second time, and 18.7% were pregnant for the third time or more. The questionnaire had two parts. The first part included questions regarding pain during the delivery and after it. The second part was the standardized PCS questionnaire (Sullivan et al. 1995), which related to catastrophizing pain. Postpartum pain was assessed using VAS (visual analogue scale). The deciding criterion for including respondents in the research group was having experienced a vaginal delivery and the willingness to co-operate. The questionnaire was distributed to hospitals in the South Bohemian Region. 810 questionnaires were distributed and 635 were completed and returned (78.4%). This fact contains partial data of the research and deals with postpartum pain. The results were assessed using the SASD (statistical analysis of social data) statistical programme.

RESULTS

472 women (74.3%) experienced postpartum pain. The women used VAS and 17 women (3.6%) marked the value "1", 58 women (12.2%) marked "2", 98 women (20.7%) marked "3", 76 women (16.1%) marked "4", 81 women (17.2%) marked "5", 51 women (10.8%) marked "6", 38 women (8.1%) marked "7", 25 women (5.3%) marked "8", 13 women (2.8%) marked "9" and 15 women (3.2%) marked "10" (unbearable pain).

We studied whether there was a connection between age and postpartum pain

(Table 1). We proved a statistically significant connection between age and postpartum pain. The youngest women (up to 25 years) stated more frequently that they did not feel postpartum pain. The older they got, the higher the frequency of feeling postpartum pain was.

Table 1 – Postpartum pain and age

	Value X^2	df	*p*	Stat. signif.
Woman's age and feeling postpartum pain	6.281	2	<0.05	a
Woman's age and level of postpartum pain	6.223	2	<0.05	a
Woman's age and where the pain was felt	27.450	10	<0.01	b
Woman's age and explaining causes of postpartum pain	0.102	2	0.950	n.s.

X^2– chi-quadrate; *p*– independence test; df– degree of freedom
n.s. – not statistically significant
a – statistically significant difference for the level of significance of α = 0.05
b – statistically significant difference for the level of significance of α = 0.01

We also proved a statistically significant connection between age and the intensity of postpartum pain. The youngest women (up 25 years) marked postpartum pain as unbearable, whereas the older women marked it as mild or not painful at all.

In the postpartum period, women can experience pain of various organs (the involution of the uterus, backache, etc.) or delivery wounds. We proved a statistically significant connection between the age and system organs related to postpartum pain. The youngest women (up to 25 years) significantly more frequently stated that they had experienced pain related to episiotomy. Women at a higher age stated that they had experienced pain related to the involution of the uterus.

We did not prove a statistically significant connection between the number of deliveries and the intensity of postpartum pain.

We also studied whether explaining postpartum pain, the woman's age and the occurrence of pain were somehow connected. The connection was not proven.

The most frequent cases of postpartum pain were related to episiotomy, the involution of the uterus and backache (Chart 1).

DISCUSSION

Mander (2014, p. 219) describes postnatal care as *"the cinderella"* of obstetrics. He is not sure whether this is because there is no *"exciting*

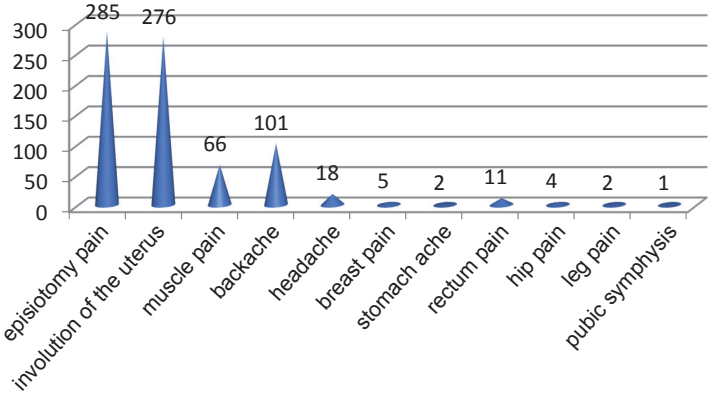

Chart 1 – Postpartum pain

expectation in pregnancy" or because of *"the beautiful insecurity of care during delivery"*. Another reason for the low level of postnatal care (according to him) is women's/mothers' underestimation of puerperium. However, this period is important for women from the psychological point of view, and also because of the need for a greater focus on postpartum pain (as proven by research) (Mander 2014). We studied whether women felt postpartum pain. If they did, we studied where they felt this pain and whether they could assess it. 472 women felt postpartum pains (74.3% of our respondents).

A vaginal delivery has many advantages, e.g. quick regeneration, the immediate mother-child bond, but it can also be associated with a perineal trauma (Declercq et al. 2014). Frohlich and Kettle (2015) state that after a vaginal delivery more than 85% of women suffer from a certain level of perineal injury. As stated by Petersen (2011), perineal pain should be regularly assessed because it affects physical, psychological and the feeling of social comfort in the postpartum period. Perineal trauma may disturb breastfeeding, the family and the sexual life of women (Frohlich and Kettle 2015). In our research, women most frequently stated that the pain was associated with episiotomy (Chart 1). Such pain may evoke discomfort during physical activities, as well as sleeplessness, long-term anxiety, communication problems and fatigue (Rogers et al. 2009, Steen 2010). One option for decreasing perineal pain is applying something cold for 15–30 minutes – ideally 20 minutes – on the painful place (Amorim Francisco et al. 2011, East et al. 2012). Another alternative for decreasing perineal pain is acupressure, i.e. pressing the BL 23 point. Pressing this point can also be used to treat backaches, lower limbs and sleeplessness (Lim 2010).The support of a partner or a midwife may help to decrease postpartum pain as well. In our research, 226 respondents stated that their partner provided the most help in managing postpartum pain, while communication with a midwife helped 157 respondents. The cause of postpartum pain was explained to 71.6% of the respondents. We were interested in the level of postpartum pain in the respondents. The women used VAS to assess the pain. 36.5% of the women experienced mild pain, 44.1% experienced moderate pain and 19.4% experienced severe pain (3.2% marked the value "10" – unbearable pain). However, this assessment was related to postpartum pain in general. The women mentioned other types of pain, such as backache, muscle pain, headache, etc. Pain from delivery injuries, muscle pains and backaches may cause the mother to not be sufficiently able to take care of her child; it can affect her self-confidence and self-respect, as well as causing the occurrence of a deep venous thrombosis due to decreased mobility because of the pain (Yerby 2000).

Our respondents also mentioned nipple pain, although this was minimal. This result appeared because the women filled in the questionnaire 3 days after delivery, when their lactation had not completely started. The research of Dewan et al. (1993) also shows that women more frequently state breast pain from the 4th post-delivery day, while before that they state feeling pain associated with the involution of the uterus. A significantly increased spasmodic pain due to the involution of the uterus during the period of breastfeeding is described in the study of Wen et al. (2015). A midwife must take such pain seriously because a woman may stop breastfeeding due to breast pain.

One of the reasons we should deal with postpartum pain is the possibility of postpartum depression, which may be evoked by unexpected postpartum pain (Yerby 2000, Kwok et al. 2015).

CONCLUSION

Due to the results, it is very important for midwives to assess postpartum pain and to educate women about the possible causes and options that affect this pain. Women should be informed about postpartum pain in prenatal courses as well.

CONFLICT OF INTERESTS

The authors have no conflict of interests to disclose.

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