

The Effects of Perineal Tears during Childbirth on Women's Sex Life

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ABSTRACT

Introduction: Perineal tears during childbirth – especially the third- and fourth-degree perineal tears – can cause annoying symptoms such as urinary or fecal incontinence and sexual discomfort. Our review revealed that little research has been published on the views and experiences of women in Greece with regards to perineal tears.

Aim: The aim of our research was to study women's experiences regarding the effects of third- and fourth-degree perineal tears on their sexual activity as well as their attitudes towards future pregnancies, and to compare them with the experiences and attitudes of women with lower-grade perineal tears. Both complications and the methods of treating perineal tears were also studied.

Methodology: A quantitative primary and correlational research was performed between groups in an experimental design using a closed-ended questionnaire and the Likert scale. The statistical tests chi square, independent samples t-test and Mann Whitney were used at a significance level of 5%. The sample of our study consisted of 159 women who had suffered perineal tears during childbirth.

Results: With most women, labor began spontaneously. Epidural or spinal anesthesia was administered along with other medications, while most of them reported they had an episiotomy. Most women reported pain in the perineal area after childbirth, experienced nausea, urinary and fecal incontinence and half of them had difficulty in voiding their bladder. Rehabilitation methods for the perineal tears were rarely applied after leaving the maternity hospital. A moderate proportion of the sample consequently considered that medical liability played a role in them sustaining perineal tears at childbirth and subsequently going through a lengthy recovery. However, the results regarding the attitudes of women towards a future pregnancy were optimistic. Sexual activity issues were observed on a very small portion of the sample. A statistically significant correlation was found regarding the degree of perineal tears and the body weight of the newborn in the first childbirth ($p=0.042$), constipation ($p=0.001$), dyspareunia ($p=0.010$), urinary incontinence after labor ($p=0.001$), urinary leakage after labor ($p < 0.001$), surgical rehabilitation of the scars after healing ($p=0.016$), prescription of antibiotics and painkillers ($p < 0.001$), systematically performing Kegel exercises at home ($p=0.001$), a specific diet plan ($p=0.004$), medical liability on the prevention and rehabilitation of perineal tears ($p < 0.001$), women's attitude towards a future pregnancy ($p < 0.001$) and the quality of their sexual activity ($p < 0.001$).

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Conclusions: Women who suffered a severe perineal tear gave birth to a newborn with a larger body weight (about 200 grams heavier), had more perineal tear related complications after childbirth – and in particular difficulty in voiding their bladder, dyspareunia, as well as urinary and fecal incontinence. In addition, it was found that women who had suffered a severe perineal tear had to undergo surgical rehabilitation of the scar after healing, take antibiotics and painkillers, systematically apply Kegel exercises at home and follow a specific diet plan. Furthermore, women who had suffered a severe perineal tear believed more that there was medical liability, which also affected the rehabilitation of their perineal tears. They also had a less positive attitude toward future pregnancies. They finally reported having had more sexual activity related issues.

Keywords: perineal tears, sexual life, postnatal complications, urinary leakage, urinary incontinence.

INTRODUCTION

Postpartum sexual life activity is influenced by many factors such as changes in hormones and anatomy or family structure after childbirth. Dyspareunia and other adversities in sexual activity such as decrease of libido after labor are common problems. The proportion of sexual life activity issues reaches 30%–60% three months after labor and 17%–31% six months after labor (1). Little is known about the long-term consequences of severe maternal morbidity, as most studies had selected data only for the period of six weeks after labor. Since various disorders can occur after childbirth, women who have complications during pregnancy and labor may experience clinical and psychological disorders that can last for a long time and can seriously affect their sexual activity (2).

Perineal tears have been known since the time of Hippocrates. They include tears of the vagina, skin, muscles between the vagina and anus (perineal skin & perineal muscles), and anal sphincter. Just below the layer of squamous epithelium and vaginal mucosa there is the triangular-shaped uterine body that forms the connection between the bulbocavernosus muscle, the superficial transverse perineal muscles and the anal sphincter (3). A third-degree tear extends through the anal sphincter muscle complex. A fourth-degree tear extends to the rectal mucosa. The incidence of such perineal tears seems to be increasing based on the worldwide literature. Third- and fourth-degree perineal tears can cause annoying symptoms such as total sexual inactivity (4). Inadequate treatment of these injuries can cause chronic perineal pain. It has also

been reported that three to six months after childbirth, up to 10% of women who had suffered a perineal tear develop stool incontinence, while up to 53% of women report gas incontinence (5). In addition, evidence suggests that the routinely use of perineotomy does not reduce the risk of severe perineal injuries (third- and fourth-degree lesions), nor does it prevent perineal tears caused during the birth of the fetal head (6).

Healthy sexual activity is a state of physical, mental and social well-being. The World Health Organization (WHO) also considers the quality of sex life as an indicator of health (2). In the context of perineal tears, sex life activity dysfunction can be considered a case of maternal morbidity (7). Consequently, sexual activity problems remain a serious issue for many women who have no knowledge of how to deal with them. Among other things, anatomical changes caused by vaginal or perineal tears can contribute to insomnia and can have significant effects on both the timing and quality of sleep during the postpartum months (8). A significant impact is observed in all aspects of sex life, such as dyspareunia, lack of vaginal lubrication, difficulty reaching orgasm, vaginal bleeding or irritation after sex, and loss of sexual desire. Studies have shown that 89% of women were able to resume sexual activity within six months after labor. The prevalence rates of sexual dysfunction range from 41%–83% at two to three months postpartum, to 7.8%–64% at six months postpartum (9), but fail to reach pre-pregnancy rates at 38% (10). Some studies show that even within more than 18 months after labor, women have significantly lower levels of sexual pleasure and emotional satisfaction (11).

Research on the benefits associated with cesarean section for the mother reveals that the decision to have a future pregnancy is influenced by the complications of the first pregnancy (12), while the Royal College of Obstetricians & Gynecologists reports that third- and fourth-degree perineal tears can significantly affect the decision for future pregnancy. This decision is also found to depend on the quality of perineal tear recovery after the first pregnancy (13).

Literature research has revealed a limited reference to the views and experiences of women in Greece regarding perineal tears. Firstly, there is only one literature review by Daniilidis *et al* (2012) (14) which presents the knowledge of the current literature on the epidemiology and predisposing factors, classification and the surgical treatment of third-degree perineal tears. Secondly, there is the work of Grigoriadis and his colleagues (2008) (5) on recording the Greek practice regarding perineotomy and the restoration of obstetric injuries of the perineum. Research needs to focus on women's attitudes and views towards the effects of third- and fourth-degree perineal tears on their sexual activity as well as on their decision towards future pregnancies and needs to compare them to the views of women with lower-grade perineal tears. According to Charitou *et al* (2019) (15), in Greece, over half of vaginal births involve performing perineotomy, thus placing Greece among countries with the highest rates of perineotomy globally. Therefore, studying the outcomes of perineal tears is important.

The purpose of this research was to study the attitudes of women regarding the effects of third- and fourth-degree perineal tears on their sexual activity as well as the decision for a future pregnancy and to compare them with the views of women with lower grade perineal tears. The differences in the treatment and rehabilitation methods were also studied. □

METHODOLOGY

Research design

A quantitative, primary and correlational study was performed between the groups in an experimental design. Primary research has the advantage of examining participants' views "directly", while quantitative research was selected since the degree of the tear, perceptions of sexu-

al problems and occurrence of a future pregnancy are all measurable concepts (16), in order to examine the relationship of variables (Muijs, 2011) and generalize the conclusions (17). The research design was proven to be accurate as women with severe tears did not show statistically significant differences in demographic and somatometric characteristics compared to those with mild tears (18).

Questionnaire

An original questionnaire of 52 questions was used, which was constructed and divided into five sections. The first section refers to the demographic and somatometric characteristics and includes five closed-type and short-answer questions. The second section contains 20 questions about the obstetric/neonatal history and is divided into three subsections. In particular, the first subsection includes three closed-type and short-answer questions about childbirth, the second subsection includes 12 dichotomous questions (Yes-No) about pregnancy problems, and the third subsection includes dichotomous questions (Yes-No) about tear complications. The sections involve Likert type questions from 1 to 5 (1=Not at all, 2=A little, 3=Moderate, 4=Much, 5=Very much). The third section includes seven questions about dealing with perineal tears after leaving the maternity hospital and four questions about the possibility of medical liability on the prevention and rehabilitation of perineal tears. The fourth section includes four questions regarding attitudes for a future pregnancy and the fifth section 11 questions about the frequency of sexual activity problems. Data were collected via Google forms; thus, sampling was convenient (17).

Data analysis

Data analysis was performed in IBM SPSS 24. Nominal variables were presented with frequencies and percentages, and the ordinal and scale variables with mean, standard deviation (SD), minimum and maximum values. Statistical tests chi square, independent samples t-test and Mann Whitney were performed with significance 5%, according to the sample sizes and the existence of normal distributions (19).

Sample

The research sample consisted of 159 women from all over Greece who had sustained perineal

tears during childbirth. The research took place in 2021. More specifically, 86.1% (N= 137) of women were 25-44 years old and 91.8% (N=146) were married, 79.8% (N=127) held a bachelor or a master's degree and 77.3% (N=123) lived in a city of more than 10 000 inhabitants. Finally, 71.7% (N=114) of women were 26-35 years old and in their first labor. The average weight of participants was 68.37 ± 13.30 kg (48-117), average height 1.66 ± 0.06 m (1.50-1.83) and average body mass index (BMI) 24.85 ± 4.55 (17.30-44.44).

Reliability analysis

The reliability analysis of factors was checked with the Cronbach Alpha coefficient, where those greater than 0.6 were considered satisfying values (20). Table 1 shows the factors with satisfying reliability.

Ethics

The necessary ethical issues that were related to the nature of research and the psychological status of participants were considered (21). In particular, the research protocol was accepted by the university research ethics committee, while a professor supervised the research process. Participants were thoroughly informed about the purpose of the research and that their answers were going to be used exclusively for it. It was

also emphasized that their participation in the research was anonymous, voluntary and involved providing a written consent. In addition, the right to withdraw at any time during the completion of the questionnaire or even one week after was clarified. The researcher shared her personal details with all participants in case they wished to contact her for any reason. □

RESULTS

Obstetric history/Neonatal history

In 74% (N=111) of cases, labor lasted up to 10 hours. 76.1% (N=121) of participants had perineal tear of the first degree. The 55.3% (N=88) of women had one birth and 37.1% (N=59) two births in their obstetric history. According to Table 2, labor was normal (vaginally) in most cases. In most cases, the first labors took place between 2013 and 2021.

The body weight of their newborn in the first birth was on average 3 306 gr and followed a downward trend with 3 254 gr in the second birth, 3 150 in the third birth and 2957 in the fourth birth. A similar downward trend was noticed in the head circumference in the first three births with 37.38 cm in the first one, 36.84 in the second one and 36.14 in the third one, with a large increase to 40.33 cm in the fourth childbirth. The gestation age had the highest mean value in the fourth delivery, with a value of 39.75 weeks, followed by 39.38 in the third delivery, 39.28 in the first one and lastly, 38.80 weeks in the second one.

Complications during pregnancy and birth

Out of all participants, 90.6% (N=144) did not experience pain during sexual intercourse before childbirth. During pregnancy, 86.8% (N=138) of women had not prepared their perineum with

TABLE 1. Reliability analysis

| Factors | Questions | Cronbach alpha |
|---------------------------------|------------|----------------|
| Perineal tears complications | 22-26 | 0.624 |
| Medical liability | 34-36, 37R | 0.761 |
| Attitude for a future pregnancy | (38-41) R | 0.650 |
| Sexual activity problems | 42-52 | 0.851 |

R: reverse score

TABLE 2. Results for the total number of births

| Variable | Category | First | Second | Third | Fourth |
|---------------|-------------------|---------------|--------------|--------------|-----------|
| Birth | Normal | 92.5% (N=147) | 83.1% (N=59) | 91.7% (N=11) | 75% (N=3) |
| | Caesarean section | 7.5% (N=12) | 16.9% (N=12) | 8.3% (N=1) | 25% (N=1) |
| Year of birth | 1983-1992 | 1.9% (N=3) | 4.3% (N=3) | 8.3% (N=1) | 0% (N=0) |
| | 1993-2002 | 7.5% (N=12) | 4.3% (N=3) | 0% (N=0) | 25% (N=1) |
| | 2003-2012 | 14.5% (N=23) | 18.6% (N=13) | 25% (N=3) | 25% (N=1) |
| | 2013-2021 | 76.1% (N=121) | 72.9% (N=51) | 66.7% (N=8) | 50% (N=2) |

massage. Also, 91.2% (N=145) did not suffer from diabetes, 96.2% (N=153) did not have hypertension and 93.1% (N=148) did not smoke. In addition, 60.4% (N=96) of women stated that labor began spontaneously. In 65.4% (N=104) of participants, epidural or dorsal anesthesia was administered during labor, 57.9% (N=92) used some form of medication during childbirth, 78.0% (N=124) did not have an instrumental childbirth and 64.2% (N=102) underwent perineotomy. Also, 87.4% (N=139) of participants had no perineal tear in a previous birth and 87.8% (N=101) did not know the degree of the tear of their perineum in the previous birth.

Perineal tear complications

After childbirth, 72.4% (N=110) of participants experienced pain in the perineal area, 51.3% (N=78) had difficulty in defecation and 61.3% (N= 92) had pain during sexual intercourse. However, 62.7% (N=96) of women had no post-natal urinary incontinence and 65.1% (N=99) no urine leakage.

Dealing with perineal tear complications

Women stated that they generally managed to handle the adverse effects of perineal tears after leaving the maternity hospital and they succeeded in this mostly by taking antibiotics and painkillers (M=2.42, SD=1.40). They also visited their obstetrician every 6-12 weeks after labor for re-examination (M= 2.23, SD=1.40), performed Kegel exercises at home (M=2.07, SD=1.41) and followed a specific diet plan (M=1.78, SD=1.23). In addition, their answers were placed between "not at all" and "little" regarding the rehabilitation of perineal tears as far as the treatment of these tears by taking laxatives iwa concerned (M=1.46, SD=1.07). Furthermore, they did not use surgical treatment at all after the healing of the wounds (M=1.30, SD=0.93), nor did they follow a physiotherapy program (M=1.15, SD=0, 61).

Medical liability on the occurrence and rehabilitation of perineal tears

Women stated that information provided during childbirth about the perineal tears was incomplete (M=3.12, SD=1.68) and the tear could have been better managed after birth (M=2.66, SD=1.54). In addition, their answers were placed between "little" and "moderate" regarding whe-

ther the perineal tear itself and its recovery might have been related to a potential event of medical malpractice (M=2.59, SD=1.59) as well as whether the obstetrician adequately presented them the plan for dealing with the sustained perineal tears after labor (M=2.54, SD=1.56).

Women's attitude regarding future pregnancies

Women were not so worried about the risk of having perineal tears in a possible future pregnancy (M=3.19, SD=1.46). Furthermore, they disagreed that a future pregnancy might degrade their quality of life (M=1.98, SD=1.29), as well as that they would not be able to easily decide on a new pregnancy (M=1.94, SD=1.34). Lastly, their answers were placed between "not at all" and "little", regarding whether they would choose another method of childbirth (for example, a caesarean section) in their next pregnancy (M=1.55, SD=1.23).

Sexual life activity complications

Women generally stated that they would rarely intentionally abstain from sexual intercourse (M=2.32, SD=1.20). During sexual intercourse they also rarely felt incapable of having orgasm (M=2.16, SD=1.25). Yet, they were dissatisfied

TABLE 3. Comparison between women of light and severe tear regarding demographic and somatometric characteristics

| Variable | Statistic | p-value |
|-----------------------------------|--------------------------|---------|
| Age* | X ² (1)=1.583 | 0.208 |
| Marital status** | X ² (1)=1.949 | 0.168+ |
| Educational level*** | X ² (2)=4.024 | 0.134 |
| Region area**** | X ² (1)=2.171 | 0.141 |
| Age at 1 st birth***** | X ² (2)=1.947 | 0.378 |
| Weight | U=1034 | 0.201 |
| Height | t (157)=-0.172 | 0.863 |
| BMI | t (157)=-1.488 | 0.139 |

*Categories 15-34 and > 34 were compared

**Married and unmarried were compared

***The graduates of high school, higher-bachelor and postgraduate-doctorate were compared

****The cities of urban center-Athens and others were compared

*****The ages ≤25, 26-30 and > 30 were compared

+Exact Fischer

TABLE 4. Statistically significant differences between women with severe and light perineal tears

| Variable | Light | Severe | Statistic | p-value |
|---|---------|---------|---------------------------|---------|
| Body weight of a newborn in the first birth | 3282.99 | 3488.89 | t (157)=-2.053 | 0.042 |
| Tear problems | 71.19 | 120.61 | U=430 | <0.001 |
| Difficulty in defecation | 46.3% | 88.9% | X ² (1)=11.538 | 0.001 |
| Pain in sexual intercourse after childbirth | 57.6% | 88.9% | X ² (1)=6.549 | 0.010 |
| Incontinence after childbirth | 32.6% | 72.2% | X ² (1)=10.671 | 0.001 |
| Leakage of urine after childbirth | 29.9% | 72.2% | X ² (1)=12.545 | <0.001 |
| Surgical treatment after healing | 74.33 | 89.18 | U=915 | 0.016 |
| Taking antibiotics and painkillers | 70.54 | 114.29 | U=471 | <0.001 |
| Kegel exercises at home | 71.69 | 105.29 | U=624 | 0.001 |
| Specific diet plan | 72.42 | 99.56 | U=721.5 | 0.004 |
| Medical liability | 70.13 | 122.29 | U=352 | <0.001 |
| Attitude for future pregnancy | 4.01 | 2.44 | t (157)=7.945 | <0.001 |
| Sexual problems | 1.65 | 2.79 | t (18.803)=-5.442 | <0.001 |

with the reduced variety of sexual activities (M=2.16, SD=1.21) and usually felt some pain (M=2.14, SD=1.21). Furthermore, their orgasms after pregnancy were mostly less intense, compared to those they had before pregnancy (M=1.99, SD=1.26). Urinary incontinence was also found to affect their sexual activity (M=1.75, SD=1.30), yet they rarely had negative feelings such as fear, disgust, shame or guilt (M=1.64, SD=1.09). In addition, women never or rarely avoided sexual intercourse due to vaginal swelling (M=1.52, SD=0.94), despite often being afraid of fecal incontinence during sexual intercourse (M=1.42, SD=0.92). Lastly, they never had urinary incontinence during sexual intercourse (M=1.27, SD=0.72) and their partner never had an erection problem, two events which may have affected their sexual life activity (M=1.23, SD=0.68).

Comparison between groups of light and severe perineal tears

According to Table 3, no statistically significant differences in demographic and somatometric characteristics were found between women who suffered a severe tear (third- or fourth-degree) and those who had a light tear (first- or second-degree) ($p \geq 0.134$).

Statistically significant differences between women of light and heavy perineal tears

Women who had suffered a severe perineal tear had a newborn baby with a higher body weight (t (157)=-2.053, $p=0.042$) in the first birth, they also had more perineal tear complications (U=430, $p < 0.001$) and in particular difficulties in defecation (χ^2 (1)=11.538, $p=0.001$), pain in sexual intercourse (χ^2 (1)=6.549, $p=0.010$), urinary incontinence (χ^2 (1)=10.671, $p=0.001$) and urinary leakage after childbirth (χ^2 (1)=12.545, $p < 0.001$). In addition, women who had suffered a severe tear used the techniques of rehabilitation to a greater extent – and specifically the surgical treatment – after wound healing (U=915, $p=0.016$), receiving antibiotics and painkillers (U=471, $p < 0.001$), performing Kegel exercises at home (U=624, $p=0.001$) and following a specific diet plan (U=721.5, $p=0.004$). Furthermore, women who had suffered a severe tear agreed more that medical liability might have contributed to the occurrence and effectiveness of rehabilitation of their perineal tears (U=352, $p < 0.001$). They also had a less positive attitude towards future pregnancies [t (157)=7.945, $p < 0.001$] and faced more sexual activity problems [t (18.803)=- 5.442, $p < 0.001$]. \square

DISCUSSION

Regarding perineal tear complications, our study found that most women reported pain after labor in the perineal area, which was in accordance with the results reported by Griffiths *et al* (2006) (22). More specifically, women in that particular study also reported symptoms of dyspareunia, which appeared postnatally and lasted up to two years. In the study of Paterson *et al* (2009) (23), almost all women of their sample reported having genital pain in the postnatal period, while 62.5% reported pain in the perineal region and the same percentage of women reported pain in the vagina as well. Other studies (23-26) have also found that women had pain during sexual intercourse in the postnatal period, which lasted from a few months to one year. Also, some other perineal tear complications, including fecal incontinence, constipation, urine leakage and urine incontinence after labor, were also reported in our study, which was in agreement with the results of Griffiths *et al*'s study (22), in which women who delivered vaginally reported urine incontinence (49%) and bowel and fecal incontinence (30%) for up to two years after birth.

The factor of medical liability with regards to appropriately preventing and appropriately rehabilitating perineal tears was moderately reported based on the report of our participants. Women also agreed on the fact that the obstetrician did not adequately present a preparation plan to them prenatally in order to avoid perineal tears, as well as a concise rehabilitation plan for properly treating the tears postnatally. Along the same lines, a 2013 systematic study (27) reported that the worldwide lack of training in clinical assessment and classification of perineal trauma was evident in both physicians and midwives. This reinforces the fact that healthcare providers generally lack sufficient knowledge and may thus make erroneous assessments in the classification of perineal tears. Consequently, undergoing training in the assessment and classification of perineal tears is vital. Midwives are in a unique position to improve the level of care in this area, as they are often the first and probably the only ones to assess the injury and can suggest a comprehensive treatment plan (27). In our research, women also stated they were not properly informed about the preparation that they

had to do before labor and thought that the trauma should have been managed in a better way postnatally. It is therefore obvious that an improved education program must be implemented internationally, which will help not only midwives but also the new mothers, through providing better information in this topic.

Regardless of the above, optimism was observed regarding the attitude towards a future pregnancy. The women of our sample reported that a future pregnancy would not degrade their quality of life and they would easily decide on a new pregnancy. They also claimed that they would not opt for a caesarean section in a future pregnancy. Optimism was also observed in the study conducted by Woolner *et al* (2019) (4), in which women in Scotland did not appear to be reluctant to considering a future pregnancy after an initial third-degree or fourth-degree perineal tear. Still, the researchers report that women with such a tear were twelve times more likely to have an elective caesarean section in following pregnancies.

Sexual activity problems were observed to a very small extent. Women in our study stated that they did not lose their libido, since they managed to have an orgasm during sexual intercourse, they were satisfied with the variety of sexual activities during intercourse and generally did not feel pain. They also stated that orgasms after pregnancy were not less intense than those experienced before pregnancy. Moreover, incontinence did not seem to affect their sexual life, as women reported having not experienced negative emotions such as fear, disgust, shame or guilt during their sexual activities. They also did not sense urine leakage during sexual intercourse and their partner did not experience any erection problems as a consequence either. In addition, women did not avoid sexual intercourse due to swelling in their vagina. However, contradictory results have been reported by Gommesen *et al* (2019) (1), who stated that for women who have suffered perineal tears during labor complications in sexual activity remained a serious problem even one year after delivery. In that particular study, more than half of women with third- or fourth-degree perineal tears actually reported some sort of sexual dysfunction.

The two groups of women in our sample, those who sustained mild perineal tears (first- or second-degree) and those who sustained severe

tears (third- or fourth-degree) had similar demographic and somatometric characteristics. This fact suggests a complete assimilation of the compared groups and it is generally of high importance since any difference of opinion is solely due to the degree of the tear rather than any other exogenous factors, thus reinforcing the results of the present study. In their first labor, women with severe perineal tears gave birth to a baby about 200 grams heavier than those with mild tears. They also suffered more complications as a result of their perineal tears after childbirth and in particular, difficulty in voiding their bladder and urine leakage. In addition, women who had suffered a severe perineal tear used a higher degree of tear management techniques (i.e., surgical rehabilitation after wound healing) used antibiotics and painkillers, did Kegel exercises at home and followed a specific diet plan. At the same time, women who had suffered a severe perineal tear assigned more medical responsibilities, had a less positive attitude towards future pregnancies, and had more sexual complications. Similar results were reported by Gommesen and colleagues (2019) (1); in their study, the perimeter of the newborn's head and the duration of the second phase of childbirth were characterized as factors that contribute to the severe adverse effects related to perineal tears. In addition, Woodley *et al* (2017) (28) stated that the above-described treatment techniques minimized potential postnatal problems. Finally, sexual life complications were presented as possible adverse outcomes in a large percentage of women who have undergone third- or fourth-degree perineal tears, due to physiological problems occurring in relation to the perineal tears (29).

Limitations and suggestions

The results of the present study cannot be generalized to the female population of Greece due to the small sample size and the convenient for the researchers' sampling application. They can be generalized only for women with an average BMI of about 25, aged 25-44 years, who were up to 35 years old in their first childbirth, married, university graduates or with postgraduate degrees and living in a city of more than 10 000 inhabitants. Also, our results are generalizable for women who had 1-2 normal births between 2013-2021, with an average newborn weight of 3 kg, an average head circumference

of 36-40 cm, an average gestational week of 39-40, a perineal tear of the first-degree and the duration of their labor was up to eight hours. With regard to the questionnaire, its low reliability regarding pregnancy complications as well as the strategies of coping with them is another limitation, together with the moderate reliability of the questionnaire's questions about the perineal tear issues and the attitude towards a future pregnancy as well as the absence of validity.

Conducting a nationwide research in the future is therefore proposed, using a simple random sampling as well as a sample size collection, which would be in accordance with the population size (17). It is also suggested to either find reliable and valid tools for all sub-study modules or improve the existing tools by adding and subtracting questions, piloting the reliability and applying the Factor Analysis technique. □

CONCLUSION

Perineal tears are a major complication of vaginal delivery. They greatly affect both the physical, sexual and mental health of women in the postnatal period. As shown in both the international literature and our study, perineal tears of the third- and fourth-degree are associated with most postnatal adverse complications. It is therefore important for women to be informed prenatally about the possibility of perineal tears during childbirth, their subsequent complications and the techniques for increasing the possibility of avoiding them. For example, they should be informed and be trained in the preventative application of perineal massage during pregnancy. In addition, they should have a total understanding of the consequences and the remedial methods available. Care must be taken to address postpartum problems such as perineal pain, fecal and urinary incontinence in all women, regardless of the degree of the tear. Women should also be encouraged to make more use of tear management strategies, regardless of the tear degree. Doctors generally need to explain the tear treatment plan in more detail. It is also understood that having an indication of an overweight child corresponds to an increased likelihood of a severe tear being sustained, so compensatory measures are necessary to be taken in such cases. Women with severe tears should be given more support with regard to dealing with

problems such as difficulty during voiding, dyspareunia and incontinence. Psychological support might also be necessary in such cases in order to strengthen those women's attitude towards a potential future pregnancy. In the presence of sexual activity issues, additional support from a specialist towards dealing with them might also

be required. Healthcare professionals should take all precautionary measures in order to prevent perineal tears and be constantly trained on new methods of perineal tear prevention and rehabilitation. □

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