

Risk of post-traumatic stress disorder in women after miscarriage

Ryzyko wystąpienia zespołu stresu pourazowego u kobiet po przeżytym poronieniu

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Słowa kluczowe: zespół stresu pourazowego, poronienie, żałoba po utracie ciąży.

Abstract

Loss of pregnancy as a result of miscarriage may cause many undesirable psychological reactions, including the risk of post-traumatic stress disorder. Its consequences are often an important clinical problem, which entails a variety of complications that may affect the overall functioning of women and their partners. Understanding the type and frequency of emotional responses to pregnancy loss is therefore essential to target appropriate support, thus minimising mental illness and health costs in long-term care. Supporting women after a miscarriage can also help build a constructive relationship with the children born after the loss, so that unresolved grief and depression do not affect their formation in a negative way. Proper communication and reliable and empathetic feedback from health professionals also seem important. The aim of the article is to describe the psychological reactions of women after miscarriage and to assess the factors that affect their occurrence.

Streszczenie

Utrata ciąży wskutek poronienia może powodować u kobiet duży stres psychiczny i obok dolegliwości fizycznych niesie również ze sobą wiele niepożądanych reakcji psychologicznych, w tym ryzyko wystąpienia zespołu stresu pourazowego. Jego konsekwencje stanowią często istotny problem kliniczny, który pociąga za sobą różnorodne powikłania mogące wpłynąć na całość funkcjonowania kobiet i ich partnerów. Zrozumienie rodzaju i częstości występowania reakcji emocjonalnych na utratę ciąży jest niezwykle ważne w celu ukierunkowania odpowiedniego wsparcia, co minimalizuje chorobowość psychiczną i koszty zdrowotne w opiece długoterminowej. Wsparcie kobiet po poronieniu może także pomóc w budowaniu konstruktywnej więzi z dziećmi urodzonymi po stracie, by nierozwiązany żal i depresja nie wpływały na ich kształtowanie w sposób negatywny. Istotne wydaje się także właściwe komunikowanie oraz rzetelne i empatyczne przekazywanie informacji przez personel medyczny. Celem artykułu jest opisanie reakcji psychologicznych kobiet po stracie dziecka w wyniku poronienia oraz ocena czynników, które wpływają na ich wystąpienie.

Introduction

Miscarriage is the most common failure of procreation [1]. With growing anxiety about its consequences for mental health, it is increasingly an area of interest for obstetrics and gynaecology also in the psychological context.

The loss of pregnancy, regardless of its type and duration, can cause a lot of mental stress in women; as well as physical ailments, it has many psychological consequences. This phenomenon is compounded by the fact that a situation of threatened pregnancy and changing the date of delivery is in most cases a sudden and unexpected surprise, without the possibility of control, and for which one cannot prepare.

Physiologically, a miscarriage means the end of pregnancy; psychologically, in turn, it may raise doubts about procreative and parental competences, and reduce self-esteem and femininity. In response to this event, many women experience a number of negative reactions, such as sadness, anger, guilt (especially when there is no medical explanation for loss), anxiety, distress, or even depression [2]. For many couples, a miscarriage is equivalent to the death of a child, and the intensity of this loss is comparable to the suffering after the death of a close family member [1]. The literature describes coping with this experience in terms of individual stages of the mourning process. The phase of negation, anger, and shock is

followed by a period of disorientation, helplessness, then a phase of re-generation, learning to live again, and reconciliation with the situation [3].

Factors influencing the course of mourning include the time of loss, validity and significance of pregnancy (e.g. first, desired pregnancy or pregnancy at the end of the reproductive period), and difficulties connected with conception [4]. Over time, these reactions reduce their intensity and most women accept the loss. However, some of them may indicate the occurrence of complicated mourning. Risk factors for mourning include past diagnoses of mental illness, childlessness, lack of social support and earlier pregnancy loss [5].

The World Health Organisation (WHO) defines miscarriage as premature loss of the foetus up to the 22nd week of pregnancy, taking into account the criterion of foetal body weight below 500 g [6]. Statistically, about 25% of early pregnancies end in a spontaneous miscarriage. Most of them occur in the first trimester of pregnancy, with a steady decrease in frequency to about 20 weeks. A recurring loss of pregnancy defined as the loss of at least three consecutive pregnancies is called a habitual miscarriage. A miscarriage can be spontaneous or aetiological. Considering the latter, many causes can be distinguished, such as immunological abnormalities, congenital or acquired metabolic syndromes predisposing to thrombophilia, genetic (carrier of balanced mutations, heterozygous forms of carrier), anatomical, infectious, and environmental factors, including smoking, drug use, or alcohol consumption [7]. Other causes of miscarriage include yellow body (corpus luteum) failure, and unregulated endocrine disorders, including the most common: diabetes, hypothyroidism, or hyperthyroidism [8]. However, most of the causes of miscarriages are of explained aetiology.

Immediately after loss, women may develop depressive reactions, anxiety disorders, even suicidal thoughts [9]. Miscarriage can also have a significant impact on the quality of life in this population [7], have a negative impact on sexual partnership [10], and, among women who already have children, disrupt the process of establishing a mother-child relationship. Above all, however, miscarriage is seen as a loss event, as a consequence of which most studies focus mainly on the risk of depression after this event. It has been reported that 30-55% of severe depression develops within 6 months after the miscarriage [2, 11-16]. However, pregnancy loss may also involve traumatic elements, even leading to posttraumatic stress disorder (PTSD) [5, 15, 17-21]. Although the International Classification of Diseases and Health-Related Problems (Tenth Revision) [22] takes into account the psychological aspects of health problems associated with childbirth and puerperium, including them in diagnostic category F53 as "Mental disorders associated with childbirth, not classified elsewhere", this clas-

sification omits the experience of losing a child, and procreative failure is described only in medical terms. Therefore, as Bielan *et al.* rightly notes [10], the psychological consequences resulting from a miscarriage are most often included in the diagnostic category F43, as an acute response to stress and adaptive disorders. However, they do not exhaust all the problems that may accompany this experience. A miscarriage, regardless of the stage of pregnancy, is considered a psychological crisis, i.e. a reaction to a difficult situation lasting about 6-8 weeks, exceeding the resources and adaptability of a healthy individual, which is characterised by increased tension, sense of discomfort, and breakdown of coping mechanisms [23]. All this may lead to a number of adverse reactions and psychological complications.

Therefore, the aim of the article is to present undesirable reactions and psychological complications after miscarriage, which significantly increase the risk of posttraumatic stress disorder.

Psychological reactions after a miscarriage

The first reactions after losing a child are usually sadness, anger, crying, disappointment, and guilt. All these emotions may persist for a very long time and intensify in certain situations, such as the sight of a family with a child, family meetings, the anniversary of a child's death, or the day of the expected birth [9]. Studies have shown that the symptoms of mourning after a miscarriage are very common and occur in as much as 90% of women [24]. Moreover, after the loss of a child, a woman experiences very strong anxiety related to trauma after its death. At the same time, this causes the association of each subsequent pregnancy with the potential risk of further loss, which intensifies the difficult emotional state of a woman.

The literature reports that the rates of depression in women after miscarriage reach up to 55% [2, 11, 13, 15, 19, 24-27], anxiety from 28% to 45% both immediately after the event and even 6 months after it [12, 14-16, 20, 27, 28]. Interesting studies in this area were conducted by Neugebauer *et al.* [13], who evaluated the mental well-being of women 2 and 6 weeks and 6 months after loss compared to women who were and women who were not pregnant. It was shown that those who miscarried, 2 weeks after loss had 3.4 and 4.3 times more depression, respectively, while after 6 weeks and 6 months the rate was 2.6 and 3 times higher. On the other hand, the frequency of anxiety disorders (including obsessive-compulsive (OCD), panic, and phobia) was verified by Klier *et al.* within 6 months of the miscarriage [14]. It was noted that loss increases the risk of initial or recurrent episodes of OCD but does not increase the risk of panic disorders or specific phobia. These results confirm the subsequent data, which noted that women may experience depression and anxiety for at least 3 years after mis-

carriage, even after successive live births [17]. Other data indicate that early pregnancy loss may be a predictive factor of postnatal depression [29]. Around one third of women who were positive for depression after miscarriage were also at increased risk of suicidal thoughts [27]. Moreover, a study in Finland showed that between 1987 and 1994 the average annual suicide rate in 1 year after miscarriage was significantly higher (18.1 per 100,000) than that of women in the general population (11.3) [14]. Risk factors include younger motherhood, loneliness, history of sexual abuse in childhood, sleep disorders, and/or anxiety disorders [16].

The abovementioned data confirm that depression or anxiety disorders after miscarriage are indeed a significant clinical problem. The duration of pregnancy is of great importance in terms of severity of these symptoms [12]. However, not all studies confirm these relationships [11, 13, 14]. Moreover, it has been reported that it is not the week in which the miscarriage took place that is important, but the significance that a woman attributes to pregnancy and its loss [1]. Therefore, the data are ambiguous and require further verification.

Childless women proved to be particularly vulnerable to the risk of depression and anxiety disorders. Studies have shown rates of psychiatric complications in this group as much as 11 times higher [13]. Interestingly, however, marriage proved to be the protective factor against the intensity of depressive symptoms after miscarriage. It has been noted that married women declared depressive symptoms less frequently than those living in informal relationships [1].

The literature also shows that the patients who experienced a miscarriage more than once had higher results of depression and anxiety intensity than the women who miscarried for the first time [1]. Thus, another procreative failure contributes to the increased discomfort of the patients, and the fact that they have already experienced a similar crisis in the past does not increase their ability to adapt. However, whether the mental suffering after a miscarriage continues until the next pregnancy or, as some authors suggest, will be solved by a new pregnancy is not yet known. Women who experience clinically significant depression and/or grief after early loss should therefore be observed until the birth of another child.

The conception can also be a factor in the occurrence of depression after miscarriage. It has been shown that women who had difficulties in this area are more likely to develop depression after this event [16]. This is probably due to the fear of whether they will be able to get pregnant again. The risk of adverse psychological reactions after miscarriage is also significantly influenced by whether it was spontaneous or pharmacologically induced. A higher percentage of psychiatric complications was associated with the latter [27].

The predictors of increased anxiety and depression have also included earlier history of psychiatric treatment and important life stressors [17].

In women, grief after a miscarriage differs in many respects from sadness after other losses. Many of them try to reduce this dysphoria by enthusiastically anticipating another pregnancy. At this point it is worth mentioning that other family members may also be affected by the loss. However, little literature is available on the impact of a miscarriage on partners. There are also no published studies concerning the partner's reaction to losses in case of homosexual couples. However, it seems that the father of the child experiences loss in a similar way and it is equally painful for him. Usually, however, he does not allow himself to experience sadness because he wants to be supportive to the woman or for fear that it will be against accepted cultural norms. Some authors even believe that fathers may be less sad because their attachment to the child is weaker [24]. Nevertheless, according to Greenfeld and Walther [30], frustration, rage, guilt, and reduced self-esteem are common in men after the loss of pregnancy. Moreover, repeated miscarriages can even lead to situational sexual erection disorders and fear of sex. Studies have also shown that it is more difficult to cope with loss for those men who have seen an ultrasound of the child [31]. The index of depressive symptoms in 56 couples after miscarriage was compared by Beutel *et al.* [32]. The study showed that 29% of women and 10% of their partners had elevated depressive rates within a week of the loss. However, the majority of studies to date have focused on situations in which a single miscarriage has occurred or on the results obtained among infertile couples, so these results should be interpreted with caution. Nevertheless, all the data cited consistently indicate an increase in affective symptomatology due to procreative failure.

Risk of posttraumatic stress disorder in women after miscarriage

The loss of a child due to miscarriage or stillbirth is considered a traumatic life event and may cause not only intense grief but also posttraumatic stress disorder [5, 15, 17–21]. These symptoms, lasting even up to several years, have been particularly observed in women whose pregnancies were terminated after the diagnosis of foetal malformations or severe chromosomal disorders [18].

Currently, more and more scientific research is focused on the risk of posttraumatic stress disorder as a possible and common result of pregnancy loss. Efforts have also been made to raise awareness of the distinction between PTSD and other complications, such as depression or mourning after the loss of a child. Understanding such strong responses to stress is important because skilful prevention can make a significant difference to the experience of subse-

quent pregnancies, particularly in terms of reducing the level of anxiety for fear of subsequent loss. Studies have shown that after a miscarriage with subsequent pregnancies, parents also declared increased levels of depressive symptoms and greater difficulty in establishing a bond with the child born [5]. As a result of a miscarriage, women are also seven times more likely to develop PTSD symptoms compared to women who have not yet been pregnant [15].

Posttraumatic stress is a disorder from the anxiety group, which is a consequence of and reaction to an extremely stressful event causing trauma. This event exceeds the coping capacity of the person who was a participant and/or witness causing non-adaptive forms of functioning. It is characterised by reliving it (intrusive memories, flashbacks, nightmares, intrusive thoughts), avoidance, emotional numbness (limited affect, social isolation), and/or increased agitation (irritability, excessive vigilance). PTSD is diagnosed when these symptoms persist for over a month [23]. Initially, the occurrence of PTSD was described in war veterans; however, as research has developed, this definition has been extended to more groups of people. Significant symptoms were also observed in women who experienced various reproductive problems, including infertility treatment, high-risk pregnancy or its loss.

An important issue in the diagnosis of PTSD is the traumatic event criterion. DSM-V [33] defines it as one that includes 'actual or impending death, serious injury, or threat to the physical integrity of oneself or others' (page 427, criterion A1). The reaction of the person at the time of the event must include fear and/or helplessness (criterion A2). In the context of a miscarriage, these reactions may be evoked by the sight of blood, foetal tissue, or the subjective perception of child death [20]. As far as the above symptoms are concerned, as much as 77% of women after the miscarriage declared intrusive memories, anxiety in remembrance situations, and common nightmares; 68% described strong feelings of helplessness. These results are confirmed by the studies of Defrain *et al.* [34].

The experience of miscarriage as a trauma is also perceived by literature when the relationship with the unborn child has developed. Studies have shown that regardless of the duration of pregnancy, it is perceived as the embodiment of hope for parenthood, and even an early pregnancy is treated as a biological child [29].

In the international literature on pregnancy loss, the problem of post-traumatic stress disorder is relatively common. Studies conducted so far suggest the prevalence of PTSD in women after miscarriage on the level of up to 39% from 1 to 3 months after the event [1, 2, 15, 19–21]. In Poland, studies on this subject have been extensively described by Murlikiewicz and Sieroszewski [1]. It has been noted that all women who had second and third miscarriages had significant outcomes in severity of PTSD symptoms, while

moderate severity of PTSD was reported by 64.29% of women for whom it was their first reproductive failure.

Available literature on the subject includes data evaluating the mental morbidity prevalence even after the diagnosis of ectopic pregnancy. Moreover, some studies suggest that the relationship between ectopic pregnancies treated surgically and increased risk of suicidal thoughts may exist [35]. Ectopic pregnancy is potentially a life-threatening condition, with sudden admission to hospital and rescue measures taken, where the loss of pregnancy is often treated secondarily. However, studies have shown that 39% of women 3 months after the ectopic pregnancy removal meet the criteria of moderate to severe PTSD [20]. Another important aspect requiring analysis is the comparison of mental response after conservative and surgical treatment of women with ectopic pregnancy. Prolonged conservative treatment may intensify anxiety and depression reactions. However, the lack of detailed data concerning this issue requires analysis and assessment of the scale of this risk.

The severity of PTSD symptoms is associated with the duration of pregnancy [19], psychological factors (dissociation, negative interpretations of symptoms, and suppression of thoughts) [36], personality factors (neuroticism), sociodemographic factors (low education) [19, 25], childlessness, previous losses (regardless of maternal status), and fertility problems [36]. Women were also much more at risk of PTSD if they felt personally responsible for the miscarriage or reported a strong bond with the unborn child [21].

Untreated posttraumatic stress disorder has a significant impact on the quality of life, social relations, ability to work, risk of suicide, psychophysical health, or future pregnancies. Of course, not all the reactions presented above are the standard, and not everyone will need advanced psychological assistance. Some may be able to cope with the support and personal resources available to them, such as family, friends, or faith. The experience of miscarriage is multidimensional and can be the result of many factors. However, it is important that medical personnel try to understand not only the medical aspect of this fact, but also the related experiences and emotions of women.

The importance of the provision of information on the miscarriage by medical personnel

The moment when the medical personnel communicate bad news is very difficult and emotionally exhausting for both sides through a series of moral and/or ethical doubts and dilemmas that arise. Negative information received from a doctor usually evokes strong emotions, triggering a cascade of cognitive and behavioural reactions that can change the patient's point of view not only for further treatment, but for

taking it at all. The most difficult issue that doctors have to deal with in this area is to report poor prognosis, difficult diagnosis, or death. International literature defines this aspect of doctors' work as "breaking bad news" [37]. Unfortunately, such information may have serious consequences for patients and their relatives. Therefore, the proper preparation of the patient and his/her family plays an important role in communicating bad news.

The literature of the subject provides many algorithms of how to communicate properly in such situations. One of the most popular is the ABCDE model, which systematises the individual stages of contact with the patient in the following way: preparation for the conversation (*Advanced preparation*), establishing good contact with the patient and/or his or her family (*Build a therapeutic environment*), conveying bad news, using elements of effective communication such as empathy, active listening, or body language (*Communicate well*), dealing with difficult emotions (*Dealing with reactions*) and adequate reaction, aiming to end the meeting (*Encourage and validate emotions*) [38]. At this stage it is very important to observe the patient's behaviour. If the patient's reaction to the message is too emotional, a psychologist working in the hospital ward can be involved in this process. Another tool proposed by the literature is the SPIKES protocol, the name of which is an acronym for the words: Setting, Perception, Information, Knowledge, Empathy, and Summarise [39]. The whole model consists of going through the various stages of the conversation starting from preparation for the meeting with the family, including the analysis of the epicrisis, switching off the mobile phone, and providing an intimate place to talk (*Setting*). The next step is to talk about the findings on the patient's condition and assessing their level of understanding of these messages (*Perception*). The next step is to talk about events that precede a poor prognosis or a difficult diagnosis (*Information*). The next step is to communicate the right information (*Knowledge*). After this stage, the doctor tries to assess the emotional reactions of the patient and/or his/her family and respond to them in an empathic and appropriate way (*Empathy*). The final point is to summarise the information provided and make sure that everything is understood (*Summarise*). Another tool is the BREAKS protocol [40], the first step of which (*Background*) is to know the patient's medical history and his/her environment, including the family and/or a person who can provide support. This will allow advancement to the next stage, aimed at establishing a relationship with the patient (*Rapport*) and opening the space for understanding his/her concerns and assessing (*Explore*) how they understand the situation, starting with what is already known to them. This is followed by a message (*Announce*) and a response to the patient's emotions (*Kindle*). The final step is to sum up (*Summarise*), making sure that the patient is

safe (e.g. if they have the opportunity to return home safely) and determining further action options.

Of course, the algorithms have an auxiliary function, and there is no need to strictly follow the individual and consecutive stages. Every conversation about providing bad information requires a personalised approach and adaptation to the individual characteristics of the patient. This is not easy and requires special interpersonal skills, patience, empathy, and tact.

In the context of a miscarriage, the communication of bad news relates to treatment failure and irreversible consequences of pregnancy loss. It is worth mentioning that the way parents find out about the loss can have a significant impact on their mourning process. Therefore, an important element in the conversation with the patient after the communication about the miscarriage should be the acceptance of her feelings, consent to express negative emotions, and time to get used to the situation [3]. It is important to remember that the message about the miscarriage should be conveyed in an atmosphere of respect and intimacy, in an isolated place, not in the hospital corridor in the presence of other patients or other hospital staff. Such a conversation is not only a plain transmission of medical facts, but above all, it is a compassionate and empathetic way for the doctor and the patient to discover the truth about what happened. It is therefore necessary to devote as much time as the patient needs, allowing her to cry and ask questions. This is difficult, but in the process of mourning it brings good results. What is more, professionalism and skilful, gentle, and kind talk about losing a child make it easier to come to terms with the situation and accept reality.

At the end of the conversation, after the transmission of unfortunate news, it is recommended to determine the therapeutic actions and offer help and support for the patient [37]. It is very important for the doctor to provide accurate information about the miscarriage, its cause (if known), what is currently happening with the female body, and whether further therapeutic actions will be needed. It is also important to explain the impact of the miscarriage on fertility and to initially assess the possibility of procreative efforts in the future. Knowing this will reduce anxiety, distress, and guilt. It is worth remembering that grief after losing a child is always a personal experience. Therefore, in the approach to a particular person the course and description of patient's reaction should be individualised, granting them the right to experience and deal with a critical situation in a specific, appropriate way. Everyone experiences it differently.

However, in order to avoid confrontation with negative and undesirable reactions of patients during transmission of unfavourable messages, doctors tend to use a number of defensive mechanisms. One of them is the use of overly professional medical terminology or medical jargon that is incomprehensible to the patient, avoiding eye contact, conveying plain

facts, or rushing informing about an unfortunate event. It may be a result of fear of showing one's own emotions during the conversation, feeling that "it costs too much", one's own fear of suffering, or belief that death is a failure. As noted by Lickiewicz *et al.* [37], physicians also tend to isolate themselves after bad news is passed on and avoid personal contact with the patient and/or his/her family due to their fear. However, this does not indicate insensitivity to the psychological reactions of the patient and his/her experiences; rather, it indicates insufficient skills to deal with such situations. Medical personnel are guided more by their own intuition, kindness, and empathy than by professional knowledge of how to convey such messages. It probably results from the fact that during medical studies, doctors learn how to save the life and health of a patient, and the elements of communication in the situation of informing about a difficult diagnosis, bad prognosis, or death of a patient are insufficient, as if they were episodic in principle. Unfortunately, it carries the risk of misunderstanding in the relationship between both parties, which may lead to an unintentional increase in stress and iatrogenic errors in women after the loss of a child as a result of miscarriage.

According to the literature, the most common mistake when a doctor provides information about a miscarriage is to objectify it, reduce it to the role of a medical case, and focus only on the patient's symptoms and test results, not on her experiences. Doctors then abuse use strictly medical terms such as "embryo", "foetus", "obsolete", "dying" instead of empathic statements such as "you lost your child", "I'm sorry, but your child died", "I can only imagine how hard it must be for you". In a situation of such a great tragedy as the loss of a child, from a psychological point of view, it is advisable to use language that is understandable, without any professional medical terminology, taking into account that what in the gynaecological nomenclature is an embryo or a foetus for a woman is her child - regardless of the duration of pregnancy.

It is also inappropriate to underestimate the situation, to comfort and calm down with inadequate phrases, such as "It happens", "It was only the eighth week of pregnancy", "It is not yet a baby at this stage of pregnancy", "You are young, everything is still ahead of you", "You will still have many children", "At least it is known that you can get pregnant". The observations of psychologists working at the gynaecology and obstetrics wards show that even with such an early pregnancy a woman has already managed to become emotionally attached to the role of a mother, and every death of a child is the death of that one child and cannot be replaced by another. The comments of the type "What has happened, has happened", "Please don't think about it anymore", or "Please forget about it" are also incorrect. Such statements will

not make it easier for the mother to accept the situation. Moreover, the misunderstanding of a woman's feelings and the underestimation of the problem may intensify the despair. In the process of mourning, it is important to start experiencing trauma and not to push negative emotions into the subconscious level. Unspeakable feelings can lead to clinically significant mental disorders. It also seems problematic to "run" too fast into the future without leaving time to adapt and get support from the environment.

The importance of communication with the patient has been for many years marginalised by the dominance of the biomedical paradigm of treatment. Nowadays, however, more and more doctors are abandoning this assumption, and the patient and his/her closest ones are becoming partners in the treatment team. This has resulted in a significant increase in effective communication, also in terms of maintaining long-term relationships. This seems to be the right perspective. An honest and factual conversation as well as an ongoing and free-from-misunderstandings knowledge about the patient's situation are also important in building a sense of hope in the patient. Above all, however, they allow appreciation of the efforts of the doctor and the therapeutic team, which are an important link in the process of effective therapy.

Conclusions

The risk of posttraumatic stress disorder among women after miscarriage is often neglected in medical or health science studies, and the available literature broadly describes mostly the issues of post-loss rights, psychological factors associated with loss, or complicated grief. Yet untreated and unrecognised psychological complications after miscarriage may not only worsen women's emotional functioning, but also affect their overall quality of life by weakening their health or depriving them of social contact. Understanding the type and frequency of emotional responses to pregnancy loss is therefore extremely important in order to target appropriate support, thus minimising mental illness and long-term health costs. Moreover, support for women after a miscarriage can also help them to build a constructive relationship with the children born after the loss, so that unresolved grief and depression do not adversely affect their formation. Screening for the risk of mental disorders and their symptoms should therefore be offered to every woman. It also seems important to involve psychologists in the work of gynaecology and obstetrics wards.

Understanding health behaviours after the loss of pregnancy is also very important in the context of recurrent miscarriages. According to Couto *et al.* [41], women with multiple losses had significantly worse results in all aspects of quality of life (physical, social, emotional functioning, pain, health condition, includ-

ing mental health, vitality) than women after one miscarriage. It should be noted, however, that cultural and methodological differences in research may play a significant role in comparing and citing such analyses.

It is also worth noting that not all the above-mentioned behaviours or psychological reactions of women after a loss are the rule. One may also consider whether the crisis related to the loss of a child as a result of miscarriage is such an objective experience that it is possible to put it into the context of statistical analyses and find common properties, the identification of which would allow a better understanding of its essence. It seems that the specificity of this moment in human life cannot be reduced to a single, all-embracing pattern, explaining it by the heterogeneity of the studied population. What is more, despite some similarities observed, each of the analysed cases presents its own individual way of experiencing this process, and both the intensity of psychological reactions and the loss of the child itself may not yield to generalisations, models, or statistical indicators. Thus, the care and support for women after the loss are all the more important. It also seems particularly important for doctors and midwives to communicate properly and to provide a reliable and full understanding of the situation, to an extent consistent with their competences.

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Conflict of interest

The authors declare no conflict of interest.

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