PRACE POGLĄDOWE
położnictwo

Infertility as a psychological problem

Niepłodność jako problem psychologiczny

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Abstract

Recently there has been enormous progress in couple infertility treatment and diagnostics. Some couples cannot conceive despite the fact that there seems to be no objective somatic or immunologic reasons. In such situations gynaecologists are helpless and couples may be overwhelmed by a sense of defeat and hopelessness. Thus, consulting a psychologist or therapist on how to cope better with the problem may be a good solution.

The objective of the following paper is to discuss the dilemmas of couples undergoing infertility treatment, related psychological problems, and to determine the need for psychological and therapeutic support. The study demonstrates numerous infertility causes and concludes that there is no universal method of dealing with them. Very frequently psychological and somatic problems overlap. Psychological causes are often the primary factors, but sometimes they are secondary derivatives of the therapeutic process.

A wide scope of factors must be considered to attempt psychological analysis of patients treated for infertility, including the influence of the family and relations within, reaction to the diagnosis and suggested treatment, the influence of religion on the treatment, the evaluation of the relations in the family of procreation, sexual life assessment, the sense of a woman's self-esteem and self-acceptance.

Basing on empirical analysis it was concluded that all women treated for infertility want to create a full family. They have problems in coping with emotional liability during treatment and a sense of fear and failure. Understanding the psychological mechanisms observed in patients treated for infertility might help to diagnose the causes of their problems with facing the new, extremely difficult situation.

Key words: **infertility** / **emotional disturbance** / **defense mechanisms** / **psychology** /

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Streszczenie

Ostatnie lata przyniosły ogromny postęp w zakresie diagnostyki i leczenia niepłodności małżeńskiej. Jednak w wielu przypadkach, mimo braku obiektywnych przyczyn niepłodności, para starająca się o dziecko nie może go mieć. W takich sytuacjach lekarze ginekolodzy pozostają bezradni. Wówczas poczucie klęski i beznadziejności ogarnia parę, a jej marzenia o dziecku stają się iluzją. W wielu przypadkach rozwiązaniem może okazać się pomoc psychologa- psychoterapeuty, który pomoże parze poradzić sobie z tym problemem.

Niniejsza praca ma na celu pokazanie dylematów małżeństw leczonych z powodu niepłodności i związanych z tym trudności natury psychologicznej oraz określenie potrzeby udzielania wsparcia psychologicznego i/lub psychoterapeutycznego.

Wyniki badań ukazują, że nie ma jednego sposobu radzenia sobie z problemem niepłodności, tak jak nie ma tylko jednej jego przyczyny. Najczęściej na problemy somatyczne nakładają się czynniki psychologiczne. W niektórych konfiguracjach problemy psychologiczne są pierwotne, w innych zaś wtórne i wynikają z samego procesu terapeutycznego. Starając się dokonać psychologicznej diagnozy osób leczonych z powodu niepłodności należy uwzględnić szeroki wachlarz czynników, takich jak: znaczenie rodziny generacyjnej i prokreacyjnej i relacji w niej panujących, reakcji na diagnozę i proponowane leczenie, wpływ wyznania religijnego na podjęcie decyzji o rozpoczęciu leczenia, ocenę współżycia seksualnego, poczucie własnej wartości i akceptację siebie w roli kobiety.

Biorąc pod uwagę wyniki analiz empirycznych można wysunąć wniosek, że to, co łączy osoby leczone z powodu niepłodności to chęć stworzenia pełnej i szczęśliwej rodziny. Zrozumienie mechanizmów psychologicznych, które występują u osób leczonych z powodu niepłodności może pomóc w rozpoznaniu przyczyn ich trudności w odnalezieniu się w nowej, bardzo trudnej dla siebie roli.

Słowa kluczowe: **niepłodność** / **zaburzenia emocjonalne** / **mechanizmy obronne** / / **psychologia** /

Infertility is not a recent problem but has affected people since time immemorial. The intensity of procreation problems manifests an upward tendency and is becoming a serious issue in the modern world, as it concerns the most vital social component. The World Health Organization (WHO) estimates that about 10-25% couples have fertility problems [1-8]. It is a noteworthy fact that the incidence of infertility in women and men is similar [9].

Past years saw enormous progress in the treatment and diagnostics of couple infertility, which has allowed for the application of sophisticated forms of therapy and, owing to the application of new genetic tests, for precise diagnostics of predispositions to diseases or pathological genotype characteristics. Nowadays, techniques for assisted reproduction, along with modern diagnostic methods (including genetic ones), improve the infertile couples' chances for a baby and enable to eliminate pathological genotype and phenotype characteristics. Presumably, the possibilities of elimination of the most frequent, genetically determined developmental disorders in the pre-implantation and prenatal period of human life development will considerably improve in near future [7, 10-12].

Nowadays, due to its extent, infertility is considered a social disease triggering numerous inconveniences and sacrifices on the part of potential parents. Enormous costs related to infertility treatment frequently present an insurmountable obstacle. Consequently, couples undergoing assisted reproduction treatment constitute only a marginal percentage of those who could potentially benefit from it.

Psychological causes of infertility

Skrzypczak et al. define psychologically conditioned infertility as functional or psychogenic infertility [13]. According to different authors, such infertility affects from 5 to 50% of the couples treated.

The authors focus on the influence of personality traits, family relationships, sexual disorders, reproductive cycle disorders and the endocrine mechanism affected by stress [6, 7, 14].

Semm shares this opinion, seeking the reasons for psychogenic infertility in the guilt complex, urgent need for having a baby, fear of labour, and sexual disorders [15]. As far as strongly psychogenic sexual disorders are concerned, Semm distinguishes their five basic forms: total lack of libido, limited libido – frigidity and the related infrequency of sexual intercourse, dyspareunia – pain during sexual intercourse, and lack of orgasm – reduced frequency of sexual intercourse following from the so-called unwillingness. The majority of these disorders may lead to procreation problems through change in sexual behaviour. However, it should be emphasised that lack of orgasm is wrongly believed to be a cause of infertility.

Another psychologically conditioned cause of infertility is vaginismus as a reaction to early traumatic experiences related to sexual intercourse (such as sexual abuse in childhood, rape) or the impotence of the husband (both psychological and physical).

Fikentscher offered a slightly different division of psychological causes of infertility. He distinguishes three factors:

1. Wrong psychological behaviour in married couples resulting from the distorted idea about sexual intercourse and labour.
2. Insane need for unconditional and immediate possession of a child, resulting in psychological and, consequently, physical stress.
3. Neuroses following from deeply rooted beliefs, including the one that sexual intercourse or labour are sinful acts [16].

Other authors, supporters of psychoanalytical concepts, such as Deutsch and Bededek Chriestie, Siebel, Taymor, Kainz, seek

the causes of infertility in subconscious defence against fear related to pregnancy and repressed conflicts [1, 17-19].

As regards men, a number of psychoanalysts, including Freud, claimed that those with procreation disorders frequently experienced sexual dysfunctions, such as impotence, which is related to their strong neuroticism (a higher degree of neuroticism in infertile men is highlighted by the latest reports, e.g. by Weiss et al.), passive-aggressive personality, compulsivity and psychosomatic symptoms [20]. According to the principles of psychoanalysis, problems concerning procreation in men are rooted in their childhood and include overprotective mothers, strict fathers, as well as being a manifestation of ambivalent feelings towards the father, which might lead to experiencing aggression concealed under submissiveness, infantile dependence, or good manners [21].

It is also necessary to highlight the relationship between infertility and depression. The symptoms of depression often appear in infertile women [13, 22-25]. Domar et al. found that the incidence of depressive symptoms in infertile women is twice as high as in the control group and represents higher intensity [26]. Meller et al. proved in their studies that an overwhelming majority of women with depression and treated for infertility had experienced their first episode of depression prior to intertility treatment [24]. Thus, it is impossible to state whether depression is a primary cause of infertility, although a number of authors showed that it may lead to hyperprolactynemia and, consequnelty, prevent pregnancy [27, 28]. Still, depression in women treated for infertility may considerably hinder their therapy and require early psychotherapeutic and pharmacological intervention.

Psychological consequences of infertility

The diagnosis of infertility is difficult for the entire family, as in many cases it causes a drastic change in their plans and goals. Such situations could trigger considerable physical, emotional and economic discomfort leading to increased frustration.

Motyka and Golańska point to the feelings of bitter social, mental and existential frustration in couples treated for infertility [29, 30].

In their opinion, *social frustration* is directly connected with social acceptance, determining the position in a social group. Childless couples are frequently exposed to criticism and lack of acceptance as, according to the majority of people, the fact of having children is a prerequisite for a safe and stable relationship. Fear of being perceived as a dysfunctional family may emerge, triggering a stronger sense of guilt and intensifying anxiety. This feeling may grow, particularly if one or both of the partners start to think about "testing themselves" by having relationships with other partners.

Psychological frustration is causally related to the need of self-acceptance undermined by the inability to have children. As self-image is closely connected with the sense of self-esteem, its disturbance disrupts the primary regulators of personality and mental life. These disruptions have a particularly disadvantageous impact on the emotional life, which is manifested by low self-esteem, a sense of guilt or emptiness, and the inability to give and receive maternal and paternal feelings.

Existential frustration concerns primarily women whose fundamental goal is to give birth to and raise a child. A great number of people consider a child to be the continuity of the family, thus providing immortality of some sort, while childlessness makes it impossible to extend their existence by inability to transfer genetic material.

The diagnosis of infertility is usually an enormous surprise for the partners and causes, particularly in women, a huge psychological burden, which may result in the following:

temporary mental disturbances resulting from sadness, depression, sense of guilt or wrong,

neurotic disorders (e.g. fear, adaptability disorders), personality disorders with respect to dynamics (e.g. self-assessment, attitudes, needs).

In most cases, the relationship between the partners becomes disturbed, which is manifested by conflicts, which lowers the self-esteem in women and increases stress [31, 32]. Sexual life becomes a monotonous routine and duty, resulting in the incidence of secondary sexual intercourse disorders [33, 34].

Lew-Starowicz claims that infertility in women affects their sense of femininity, which they then perceive as inadequate [35]. Motherhood becomes the ideal believed to be the guarantee of a happy married life. The inability to be fulfilled as a mother is the reason for thinking that life is meaningless, as a great number of women regard life without children as aimless. Moreover, studies demonstrate that infertility in women (unlike in men) destroys their sense of identity and leaves them with the feeling of incompleteness and hurt [36].

Infertility may trigger a number of different defence mechanisms, revaluations and attempts to change attitude towards other people:

"Placing blame" means seeking an answer to the following questions: why did it happen and who is to blame? There are several possible answers, but none of them is satisfactory for women. They frequently seek real or imaginary reasons in themselves, which consolidates a sense of guilt and inferiority, as it is one's SELF that is guilty.

Women blame their parents for inadequate education or insufficient care, their current or previous partners, and doctors for imaginary or real diagnostic and therapeutic errors, inadequate medical expertise, etc.

Changes in attitudes towards women enjoying motherhood. Changes in attitudes may occur at different levels and may be conscious or subconscious. Pregnant women or mothers may provoke envy, rivalry or even aggression. Moreover, infertile women seek errors and shortcomings in their behaviour, which results in tension, conflicts and "sick" jealousy. However, positive attitudes, including assistance offered to pregnant women or mothers with babies, friendship or transfer of maternal feelings to children of friends are also observed.

Changes in attitudes towards partners may manifest themselves in a number of ways, such as "babying" the husbands. This may satisfy some men in their need for being both husbands and babies, but may be a problem for those who are more independent and perceive their such behaviour as a threat to their independence.

Fear of losing a partner, which means the fear that he may transfer his feelings to a woman who will give him a child. This stirs up jealousy, mistrust and excessive control over partner's behaviour towards other women. The manner of coping with these feelings is to "compensate" the partner for the lack of baby, which involves putting him in the centre of attention, increased

sexual activity, reinforcing his conviction about the woman's love and indispensability.

"Becoming ill" is a specific mechanism used to arouse the partner's interest by suffering and being in desperate need of the man's help. Such behaviour (frequently subconscious) aims to arouse the partner's protective feelings and oblige him to remain in the relationship. This is frequently a symbolic call for help, thoughtfulness, fidelity and attention.

"*I cannot give you a child"* – is a mechanism resulting from a sense of guilt towards the partner. It comprises either "rewarding" the partner or provoking him to leave – "I am worse than other women, I have failed to meet your parental needs".

Neurotisation – may be the consequence of conflicts following from unfulfilled motherhood. Its consequences include neuroses, often affecting various body organs.

Compensation mechanisms – may contribute to regaining the lost sense of self-esteem. This is achieved by positive and creative or conflictogenic mechanisms.

The positive and creative mechanisms include increased professional, social or educational activity helping the women regain self-confidence and a sense of being needed and accepted. This restores internal harmony and order, and helps determine life goals. Such defence mechanisms are most appropriate from the psychological and therapeutic point of view.

The conflictogenic mechanisms may consist in highlighting own advantages, values and strengths, including sexual appeal. Life becomes a permanent demonstration of one's assets, which, in turn, may be the reason for conflicts with other women, trigger a sense of threat, rivalry and annoyance [35, 37].

Partners usually cope with infertility in different manners [38]. Studies conducted by Kowalcek et al. with the use of the Chronic Disease Management Inventory developed by Freiburg, demonstrated that men activated all the management strategies measured in this inventory (depressive, focused on the problem, diversion of attention, religious, seeking sense of life, trivialisation and wishful thinking) [39]. Women, on the other hand, applied a depressive strategy and diversion of attention from the sources of stress. The complementarity of strategies applied by the partners favours their better adaptation to the situation resulting from the disorder, meaning not only infertility, but also other chronic diseases, e.g. rheumatism [23, 40].

Personality factors characterising infertile people

Majority of Polish and foreign studies on the personality traits of infertile people concern women. Their results demonstrate that childless women are considered "inadequate", as they fail to fulfil their fundamental socio-biological duties, while infertile men are not assessed in the same manner [41]. A great number of authors point to emotional immaturity and incomplete acceptance of the position of women related to the early development stages and primarily to the period of sexual identity development, as well as negative or ambivalent attitudes towards pregnancy, labour and the partner [6,7,13, 29,31,32, 42,43, 44,45]. Women treated for infertility quite often have a neurotic personality structure, especially those who demonstrate a neurotic need for love, poor self-acceptance and the lack of meaning of life. This may be accompanied by conflicts and psychosexual disorders. The sense of self-esteem of infertile women influences their relationship with partners, as well as their doctors. A number of researchers, including Schilling, claim that high self-esteem favours a closer relationship with the partner and the patient is less reserved towards the doctor [46]. Infertile men demonstrate a different relationship, as their high self-esteem favours depreciation of the doctor and increases reservation.

Studies on the temperament and personality traits of infertile couples conducted by Fassino et al. demonstrate that women with functional infertility manifest lower cooperativeness and internal locus of control and tend to apply avoidance strategies in difficult situations [47].

Polish studies conducted by Bidzan and Józefiak with the use of the CAS Inventory developed by G.C.L Davey and the Coping Inventory for Stressful Situations CISS developed by N.S. Endler and J. D. A. Parker (Polish adaptation by P.Szczepanik), measuring the manners of coping with stressful situations, demonstrate that unlike women having children, childless women use escaping strategies (avoidance) considerably more frequently in the process of coping with difficult situations [5, 48]. Moreover, an increased application of escaping strategies is related to a larger intensity of negative feelings resulting from procreation problems, the age of patients (older age results in a lower preference for escaping and distraction of attention from the stressor); a sense of responsibility (a greater sense of responsibility results in a larger preference for avoidance).

Publications concerning personality traits of infertile men include numerous contradictions. According to a number of authors, men experience fewer negative emotions related to infertility than women [9, 49]. Other authors, including Menning, Mahlstead or Gąsiorowska claim that the situation is exactly the opposite and that the diagnosis of infertility in men involves more negative emotions including depression, a sense of guilt, lower self-assessment and self-esteem, which results in avoiding social contacts, the feeling of being deprived of significant emotional relations, and undermined confidence in their abilities [50-52]. These authors point to an external locus of control in infertile men, which is consistent with the majority of studies on locus of control in women treated for infertility. The third group of researchers claims that men are emotionally affected by infertility to the same degree as women [53, 54].

It is believed that similarly to the infertility in women, all the negative reactions occurring in male infertility deteriorate along with treatment [6, 55]. More recent studies concerning the psychological functioning of the men with infertility, conducted at the Institute of Psychology, University of Gdańsk, demonstrated that infertile men measured with the ACL personality test are not different, in terms of the majority of personality traits, from fertile men [56, 57].

Significant differences were observed only with respect to the intensity of the need for affiliation, which was lower in infertile men, excessive self-control and lower originality. Apart from the personality of infertile men, the studies covered the degree of the sense of guilt, measured with the Sense of Guilt Questionnare developed by Kofta, Brzeziński, Ignaczak locus of control (measured with the J. B. Rotter Scale)**,** and the type of gender measured with the Psychological Sex Inventory developed by Kuczyńska [58-60]. Infertile and fertile men studied in respect of these parameters did not differ. As far as the sense of guilt is concerned, the absence of substantial differences does not mean

that infertile men do not feel guilty. All men treated for infertility demonstrated a high or at least average sense of guilt.

The present survey does not provide decisive conclusions. It seems that a longer period of diagnostic tests and treatment results in a higher probability of the appearance of negative emotions in both partners and thus, a higher likelihood of differences between infertile persons and couples with no procreation disorders [49, 55].

Psychological problems related to treatment of infertility

A diagnosis of infertility comes as an enormous surprise for partners, often thwarting their life plans and goals. Infertility frequently leads to a sense of defeat, lack of fulfilment in the role of mother and father, and dilemmas with respect to the meaningfulness of the relationship.

Kornas-Biela points to possible moral and religious dilemmas related to the selection of the method of artificial reproduction [34, 61]. These decisions are particularly difficult for the women of Roman Catholic denomination. As such treatment is not accepted by the Catholic Church, a great number of women and their partners face a conflict of conscience, often triggering immature defence mechanisms. They include rationalisation, denial, projection, suppression, belittling the problem (it is not important how a child is conceived), aggression (e.g. fierce criticism of the Catholic Church and its teachings). All these immature mechanisms of coping with the infertility problem may be the reason for the incidence of neuroses and psychosomatic diseases, and disturbed functioning in different areas of life, primarily concerning family life and attitudes towards children

Another problem of considerable significance is sexual life deprived of emotional engagement and solely aimed at conception, as well as conflicts concerning parenthood desires. Despite a declared wish to have children and lack of pressure on the part of the closest relatives, a number of women subconsciously avoid pregnancy. The reasons for this may include a fear of giving birth to a disabled child, concealed remorse resulting from prior contraception or abortions, a fear of losing good looks or becoming overweight, a fear of losing husband's affection or expected problems at work and or with professional career [17].

The majority of women who undergo prolonged procedures for assisted reproduction represent a high degree of fear, anxiety and depression, which may be a secondary reason for further procreation failures [7, 34, 42, 43, 61, 62, 63,70]. It seems that the discussion on psychological problems related to treatment of infertility is frequently based on stereotypes and not on facts. Undoubtedly, prolonged and mentally, psychologically and economically difficult procedures for assisted reproduction trigger different emotional reactions in women. Such emotional differences largely depend on the treatment stage, the kind of therapeutic procedure applied and on the length of time a couple treated for infertility has been trying to conceive a child.

Boivin points to a number of risk factors for the development of psychological problems occurring during infertility therapy [64]. He distinguishes three primary groups of factors: personal, situational or social, and treatment related. Personal factors include prior psychopathology (e.g. personality disorders, depression), primary infertility, being a female, perception of parenthood as the primary goal of adult life, avoidance strategies (avoidance, wishful thinking, fantasies). Situational or social factors include poor marriage relationships, poor social network, and situations or persons reminding the couple about the problem, such as other pregnant women, babies, family meetings, holidays. The third group of factors is related to treatment and includes side effects (e.g. mood swings), situations posing a threat to pregnancy (e.g.: miscarriages, failures in treatment), the moment of making important decisions (e.g.: discontinuation of therapy, long-term storage of embroys). Combinations of these factors are also frequent, which may result in very strong stress. It is necessary to remember, however, that the risk posed by a number of these factors may be reduced by buffering factors including sound marriage relations and effective social or psychological support.

Yet, despite the continuous progress in modern medicine and the substantial number of available sophisticated techniques for assisted reproduction, it is still impossible to guarantee all couples a healthy child conceived through *in vitro* procedures. A large percentage of failures in artificial fertilisation and repeated procedures (including invasive ones, therapy continues for several years, costs) exacerbate psychological problems of women treated for infertility. Thus, it is crucial to provide infertile couples with continuous professional psychological assistance.

According to some studies, about 40% of patients feel the need to use the help of psychologists [49]. However, the need for psychological assistance depends on the treatment stage. This particularly concerns persons whose assessment of the consequences of their infertility is particularly negative. Women's needs of psychological assistance grow in particular in the first year of treatment.

Nowadays, psychological help is primarily offered in relation with the chosen method of infertility treatment (e.g. IVF), usually in later stages of therapy. Early psychological assistance at the stage of diagnosing the infertility, when emotional consequences of infertility begin to surface, could have a positive impact on the attitude towards the treatment and its effects [6,65].

Summary

The paper's objective is to show dilemmas of patients treated for infertility and related psychological problems, as well as demonstrate the need for psychological and psychotherapeutic support.

The survey proves that there is neither one manner of coping with infertility problem nor one reason for it. Somatic problems and psychological factors most frequently overlap. In a number of configurations ,psychological problems are of primary origin while in others they are secondary and result from the therapeutic process itself. While attempting psychological diagnosis of the persons treated for infertility, it is necessary to consider a wide range of factors including somatic disorders and genetic predispositions underlying infertility, the family of origin and family relationships, reaction to the diagnosis and suggested treatment, influence of faith on the decision to start treatment, the assessment of relationships in the family of procreation, the assessment of sexual life, self-esteem and self-acceptance in the role of a woman. To understand why couples decide to undergo infertility therapy and how they emotionally cope with this problem, the following factors should be considered: the reasons for the decision to undergo treatment, mental condition and emotions observed at the moment of diagnosis, the kind of

support and the manner of coping with the problem, as well as readiness for making use of psychological and psychotherapeutic support.

Given the current results, it is possible to conclude that women treated for infertility share the wish to create a full and happy family. They are also characterised by problems in coping with emotional lability during the treatment, a sense of fear and lack of parental fulfilment. Infertile men represent similar characteristics.

It seems that the understanding of psychological mechanisms used by persons treated for infertility may be helpful in the diagnosis of their problem in coping with the new, difficult situation. There are also some grounds to believe that overcoming psychological barriers may considerably facilitate the treatment of infertile couples. Thus, it would be of great importance to further carry out more comprehensive studies on the issues discussed in the paper.

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