

Journal of Sexual and Mental Health 2024, 22 Copyright © 2024 Via Medica ISSN 2956–4956, e-ISSN: 2956-5677 DOI: 10.5603/jsmh.96545

# Cognitive behavioural therapy for hypolibidemia in women

Kamila Jakubiak-Leńczuk<sup>1, 2</sup>

<sup>1</sup>MentalPath Centre in Warsaw, Warszawa, Poland <sup>2</sup>The Cognitive Institute — School of Psychotherapy, Warszawa, Poland

#### Abstract

The aim of this article is to introduce the issue of loss or absence of sexual needs and to propose therapeutic approaches. Hypolibidemia is the most common sexual dysfunction in women, hence the need to popularise the issue. Emphasis is placed on the description of interventions in the cognitive-behavioural approach, as the approach with the greatest research-proven effectiveness. It offers a range of cognitive as well as behavioural techniques, thus offering the possibility to tailor therapeutic interventions to the needs of the individual patient. The article refers to cisgendered women, i.e. those with a coherence between the female sex assigned at birth and the female gender identity. This is due to the paucity of research dedicated to desire dysfunction in transgender women.

Keywords: cognitive behavioural psychotherapy, sexual dysfunction, lack or loss of desire, hypolibidemia, female sexual dysfunction

Journal of Sexual and Mental Health 2024; 22: 26–38

#### Introduction

Understanding female sexuality is an issue that is subject to dynamic change. It is clear that there are significant differences between female and male sexuality, but also within the group of women themselves, if only because of the sheer variability in their life cycle. There is no single theoretical model that represents female sexual reactivity in an exhaustive way. Furthermore, there is no consensus on a standard to establish a "typical" sexual interest, which is equated with perceived desire. Women who show no desire to engage in sexual activity present a significant diagnostic as well as therapeutic challenge. It is worth remembering, however, that the loss of interest in sexual activity may itself be a temporary state, a response to experienced difficulties in everyday life, and need not be understood as sexual dysfunction per se. A research study of the sexuality of Poles [1] indicates that the factors influencing the emergence of difficulties in the sexual life of women (n = 1123)<sup>1</sup> are most often the following: fear of unwanted pre-

 $\overline{}^{1}\text{Respondents}$  could indicate more than one answer. This means that the percentages do not add up to 100.

Address for correspondence: Kamila Jakubiak-Leńczuk MentalPath Centre in Warsaw ul. Puławska 12/10, 02–566 Warszawa, Poland e-mail: k.jakubiak.lenczuk@gmail.com

 gnancy (18.1%), illness or malaise (15.6%), fatigue and stress (14.7%), and lack of suitable conditions (7.4%; situation when not alone at home). In addition, women experienced difficulties over the 12 months related to the following: soreness during intercourse (17%), not wanting to have intercourse enough compared to their partner's needs (16%), and not having enough sexual needs (8%). Research and studies that examine the prevalence levels of sexual dysfunctions show a high incidence of desire disorders in women between the ages of 18 and 59 years. Both in Poland and internationally, hypolibidemia is the most common dysfunction and accounts for approximately 30% of those experiencing sexual dysfunction [2, 3].

It is important to mention that not all people experiencing difficulties in their sexual lives reach out for professional help, or only come forward when the coping strategies used are no longer sufficient. This tends to perpetuate the existence of the problem and also influences the co-occurrence of other difficulties or disorders. This is why, when a person suffering from loss of libido comes forward, it is so important to diagnose and correctly identify the diagnosis. This is the first step towards understanding the problem the patient is facing, so that apt therapeutic interventions can be applied, which the cognitive-behavioural approach offers.

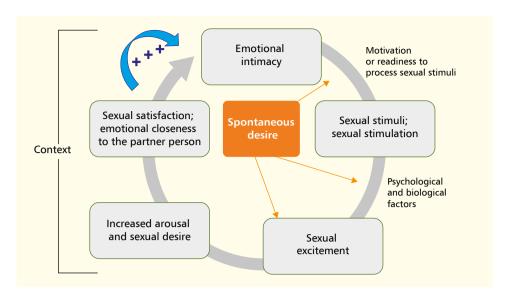


Figure 1. R. Basson's circular model of female sexual reactivity

### What is desire?

Desire consists of several aspects: physical, psychological, relational, environmental, and cultural. It is the resultant of these factors that will determine whether there will be a desire and drive for sexual activity or whether the person will avoid it. As defined by Stephen Levine [4], desire can be viewed in terms of a spectrum, ranging from aversion to indifference to intense sexual need. Terms such as sexual motivation, sexual desire, libido, or sexual appetite are used interchangeably to describe desire. For people with a perceived low level of interest in sexual activity, the term sexual frigidity, which has a rather negative connotation, is not recommended.

### Historical background

Desire is one element in the human sexual response cycle. It was not initially included in the model proposed in the 1960s by the pioneers of sexology, William Masters and Virginia Johnson. Their model assumed a progressive succession of 4 phases: excitement (Excitation), plateau (Plateau), orgasm (Orgasm), and relaxation (Resolution). This model — otherwise known as EPOR — was linear and did not assume specific changes between female and male sexual response. The main determinant of the successive phases was to be the physiological responses observed in the subjects. Desire was incorporated into the model later, in the 1970s, by Helen Singer Kaplan, who referred to her own clinical practice in this way. Patients presenting for help complained not so much of a lack of arousal but a lack of desire for intimate contact in general. Her reformulated model (DEO) assumed the existence of 3 key elements: desire (Desire), excitement (Excitation),

and orgasm (Orgasm). Ultimately, 4 phases starting with desire, excitement, orgasm, and ending with relaxation (DEOR model) were included in a model called Masters-Johnson-Kaplan. The concept of seeing the sexual response in this juxtaposition served to create the American Psychiatric Association's diagnostic criteria for sexual disorders (DSM-III and DSM-IV). Depending on which phase the symptoms appear in, it is possible to make a diagnosis (e.g. orgasmic phase — orgasmic disorder, arousal phase — sexual arousal disorder) and thus propose a treatment focused on the specific problem [5, 6].

A more contemporary model of women's sexual response assumes circularity rather than linearity. Rosemary Basson, in 2001, took into account the non--sexual aspects that lead women to engage in sexual activity [7]. Central to this assumption is that a woman may choose to engage in an intimate situation despite a lack of desire. This may be motivated by aspects such as the desire to build physical and emotional closeness with a partner, to confirm one's own physical attractiveness, to relieve stress, or even to get rid of guilt caused by previous refusal. Basson's model (Fig. 1) emphasises the possibility that desire may arise as a result of sexual stimulation, focusing on sexual sensations, or engaging in sexual activity. To define this, the concept of "responsive desire" (a.k.a. receptive, reactive desire) was coined, which occurs in response to a partner's engagement in sexual activity. A cognitive factor is included in the model — a positive interpretation of sexual activity increases the motivation to engage in sexual activity in the future, whereas, if interpreted negatively, it decreases the level of desire and reduces the chance of engaging in further activity with the person. Basson

additionally emphasises the importance of context, which influences the likelihood of obtaining a state of arousal and thus obtaining desire. This model became the foundation for the criterion of female desire/arousal disorder in the DSM-5 classification [8, 9].

Also helpful in understanding the phenomenon of sexual desire is the so-called Dual Control Model proposed by Erick Jansenn and John Bancroft in 2000 [10]. This model assumes the existence of 2 systems in the brain: arousal and inhibition, and the balance between them will determine a person's sexual response. In addition to neurobiological conditioning, situational, cultural, and relational contexts are also important. According to the authors, the key factor is the individual predisposition that will lead a person to respond with arousal or inhibition. It is noteworthy that the inhibition mechanism is extremely important from the perspective of adaptive behaviour because it allows the person to focus attention on everyday, non-sexual matters. In contrast, a lack of inhibition carries a significant risk of engaging in risky, punitive, or socially ostracising behaviour.

### Diagnostic criteria for desire disorders

According to Cathryn G. Pridal and Joseph LoPiccolo, "disorders of sexual desire are among the most common sexual problems that therapists encounter" and "part of the difficulty in diagnosis stems from the lack of agreed norms defining what constitutes normal sexual interest" [11]. It is difficult to have uniform criteria that take into account, for example, cultural differences or variability in the level of sexual needs in a woman's life line (pregnancy, postpartum, menopause). In making the diagnosis, it is important to look closely at the circumstances surrounding the loss or lack of interest in sex. Using the criteria in the International Statistical Classification of Diseases and Health Problems revision ten of the ICD-10 [12], it is possible to make a diagnosis of Lack or loss of sexual needs (F52.0), which is coded in chapter F52 as Sexual dysfunction not caused by an organic disorder or somatic disease. The prerequisite is that the following criteria are met:

- A. General sexual dysfunction:
- G1. A person is not able to participate in sexual relationships appropriately according to their desires.
- G2. Dysfunction is common but may not manifest itself in certain situations.
- G3. Dysfunction was present for at least 6 months.

- G4. The dysfunction is completely unattributable to other mental and behavioural disorders classified according to ICD-10, or to somatic conditions (such as endocrine disorders) or pharmacotherapy.
- B. Lack or loss of sexual desire, manifested by decreased interest in sexual topics, thinking about sexual matters with feelings of desire and decreased sexual imagery.
- C. Lack of interest in initiating sexual activity both with a partner and in a masturbation situation, leading to sexual activity with a frequency that is clearly lower than expected given age and circumstances, or with a frequency that is very much reduced compared to a previously much higher level.

As of 1 January 2022, the 11th revision of the International Statistical Classification of Diseases and Health Problems<sup>2</sup> [13] defines sexual dysfunction as a set of difficulties that an adult may have in experiencing satisfaction during consensual sexual activity. For a diagnosis of sexual dysfunction to be made, the problem must meet 3 criteria: 1. it must occur frequently, although in some cases it may not occur, 2. it must have been present for at least a few months, and 3. it must be associated with suffering of clinically significant severity. A description of sexual dysfunction is included in Chapter 17 of Sexual Health Related Conditions, which includes the diagnosis of (HA00) Hypoactive Sexual Desire Dysfunction. This is characterised by a lack or marked decrease in desire or motivation to engage in sexual activity, which manifests itself through: 1. a reduction or loss of spontaneous desire (reduction or loss of thoughts of an erotic nature/sexual fantasies), 2. a reduction or loss of sensitivity to erotic signals and stimulation, 3. an inability to sustain desire or interest in sexual activity that has already begun. Based on the nature of the difficulties, hypoactive sexual desire dysfunction can be specified as: (HA00.0) primary, generalised; (HA00.1) primary, situational; (HA00.2) acquired, generalised; (HA00.3) acquired, situational; and (HA00.Z) unspecified [14].

In addition, if necessary, you can elaborate on what the dysfunction is caused by — (HA40) aetiological factors in sexual dysfunctions and disorders associated with sexual pain; (HA40.0) illness, injury, effect of surgery or radiotherapy; (HA40.1) psychological or behavioural factors, including psychiatric disorders; (HA40.2) psychoactive substance or drug use; (HA40.3) lack of knowledge or experience;

<sup>&</sup>lt;sup>2</sup>At the time of writing, the official translation has not yet been published, and it may differ from the official version.

(HA40.4) relational factors; (HA40.5) cultural factors; or in the absence of specific aetiological factors, a code may be used: HA40.Y.

In contrast, in the American Psychiatric Association's classification of psychiatric disorders DSM-5 [15], published in 2013, the criterion of "Female sexual interest/arousal disorder" (FSIAD) can be used to describe the absence or loss of sexual needs, which is a combination of the previous diagnoses Hypoactive Sexual Desire Disorder (HSDD) and Female Sexual Arousal Disorder (FSAD). This is due to the difficulty in separating and the frequent co-occurrence of difficulties at both stages. The diagnosis of FSIAD requires a temporal criterion, meaning that the dysfunction must have persisted for at least 6 months, be the cause of clinically significant distress, and cannot be better explained by the presence of another disorder, the influence of medication, or be caused by another general medical condition. Importantly, it must also not be the result of a serious stressor or relationship problem such as violence. At least 3 of the 6 criteria are also required for diagnosis:

Lack or loss of interest in sexual activity.

- 1. Absence or decrease in frequency of thoughts or fantasies of a sexual nature.
- Lack of or reduced initiative to initiate sexual activity and usually no response to the partner's attempts to initiate it.
- 3. Lack of or reduced sensation of arousal/pleasure for almost all or all intercourse situations.
- 4. Absence or reduction of sexual interest or excitement in response to any internal or external stimulus of a sexual or erotic nature (e.g. fantasy, visual stimulus, auditory stimulus).
- Absence or decreased intensity of genital and non-genital sensations during sexual activity for almost all or all situations.

In addition, the DSM-5 criteria provide the opportunity to clarify whether the dysfunction is lifelong or acquired; whether it is generalised or situational; and the severity of the suffering, choosing from mild, moderate, and severe.

It is worth mentioning that in each classification mentioned, it is important to meet the criterion of perceived subjective suffering in response to the lack or loss of interest in sex. This is important because there are some people who do not feel sexual needs or desire for other people — regardless of their sex — and this condition is not a source of suffering for them. Such individuals identify with an asexual orientation [16].

### Reasons that may influence reduction or loss of desire

As mentioned earlier, desire consists of several aspects: physical, psychological, relational, environmental, and cultural. It is important to explore these areas during the diagnostic process and in the qualification process for therapy. In addition, discovering the factors contributing to the dysfunction makes up the subsequent therapeutic process, the aim of which is to create an individual patient profile. An exemplary list of areas to be explored is included in Table 1 [17]. It is worth mentioning that the interview collection itself can have therapeutic value because it helps to familiarise with the topic of sexuality, which fits in with the PLISSIT model, which will be discussed in more detail later in this article.

### Cognitive aspect in the genesis of sexual dysfunctions

Pedro Nobre and his team [18], based on a review of the available literature, presented a model illustrating the relationship between cognitive factors and sexual functioning, in which all the element interact with each other. Relevant elements that can be distinguished in this model are as follows: distraction/focus on erotic stimuli, content of automatic thoughts, attribution of negative sexual situations from the past, performance expectations, and perceived expectations of self from the partner. This model is shown in Figure 2.

It is worth mentioning that studies compiled by Pedro Nobre and Jose Pinto-Gouveia [19–22] indicate that women suffering from sexual dysfunction complain of a loss of feelings of pleasure and satisfaction, with an increased intensity of unpleasant emotions, namely sadness, disappointment, guilt, shame, and anger. Furthermore, current reports indicate that the onset of sexual dysfunction is not necessarily influenced by anxiety, which was previously perceived as the main 'culprit' of difficulties in sexual life. Anxiety as an emotion can increase, decrease, or have no effect on the level of sexual arousal. For this reason, caution is advised in limiting therapeutic interventions aimed only at reducing anxiety [23].

In 2013, Justyna Oettingen [24] presented an integrated cognitive model of the emergence of sexual dysfunction based on Beck's cognitive concept and Barlow's model of functional and dysfunctional sexual performance. It assumes that sexual behaviour

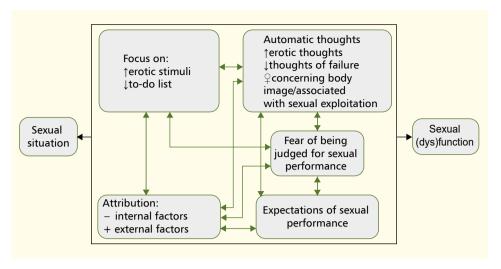


Figure 2. Own elaboration, based on [18]

is a combination of biological, psychological, socio-cultural, and interpersonal factors and is therefore individualised. This model emphasises the particular importance of the interpretation of the situation or sexual stimulus and the subsequent consequences of this evaluation. It will affect the cognitive, affective, attentional, physiological, behavioural, and motivational systems. Thus, the course of cognitive appraisal will determine the drive towards or withdrawal from sexual activity.

### Treatment of lack or loss of sexual needs in women

The treatment of hypolibidemia is a complex task that often requires the cooperation of many specialists, including an endocrinologist, gynaecologist, sexologist, and psychotherapist. To date, no "pink Viagra" has been invented that can arouse sexual desire in women. To date, flibanserin is the only drug that has been approved for the treatment of low sexual desire in women in the United States and Canada. It affects serotonin and dopamine receptors in the brain and was initially used in patients diagnosed with major depression. Positive effects on women's sexual functioning have been noted during the use of flibanserin. However, systematic reviews and meta-analyses from 2014-2017 showed little positive effect on reduced sexual desire in women, while highlighting its negative side effects (nausea, dizziness, fatigue) and restrictive use (prohibition of combination with alcohol) [9, 25].

In the absence of available and proven pharmacotherapy to address desire issues, psychotherapy is considered the main treatment modality for hypolibidemia. Currently, cognitive-behavioural therapy is considered a modality with significant results in the treatment of sexual dysfunction, as it is based on reducing symptoms, locating the source of the problem, working on improving functioning, and preventing relapse. Sexual dysfunction therapy has evolved over time. In the 1960s, psychoanalysis was still the dominant approach to treating sexual dysfunction. Thus, William Masters and Virginia Johnson's introduction of techniques based primarily on behavioural work revolutionised the way they worked with sexual dysfunction. Their original programme involved intensive work with a couple, limited to a two-week period [10]. The couple's task was to use the Sensate Focus technique between sessions, which was based on sensory focus, sensory therapy instead of goal-oriented behaviour, i.e. orgasm or penetration. Nowadays, sex therapy does not only focus on behavioural change, but also on cognitive work. This involves uncovering the belief system, recognising interpretations of the situation, and identifying the patient's typical reactions to the thoughts that arise. Modifying dysfunctional beliefs allows for more lasting change in the area of thoughts, behaviour, or mood.

### PLISSIT model

The PLISSIT model of sex therapy was created by Jack S. Annon in 1976, with the main idea being to provide a basis for working with sexual dysfunction [26]. The model is based on several stages: permission, limited information, specific suggestions, and

intensive therapy. Therapy begins by creating the right conditions for broaching the topic of sex and building a therapeutic relationship that provides a sense of safety. This is the element that starts the therapeutic work, while it is interwoven with further stages in the course of the therapy. Another element is the collection of an interview, which is an important tool for building a conceptualisation of the problem with which the patient comes forward. It is worth considering that a well-collected interview includes a cognitive interpretation of past events. For example, if the professional learns that the patient's parent was addicted to alcohol, it is important to ask what relevance this may have had in the patient's experience, or whether the parent's alcoholic illness may have influenced the development of the subject's sexual dysfunction. In addition, if the patient discloses beliefs about sex (e.g. "All men only care about one thing") it is worth inquiring about the genesis of such a belief. Based on the list in Table 1, it may be helpful to identify the relevant causes of the dysfunction. The next step is to identify and discuss with the patient the problem she is currently experiencing, using clear vocabulary adapted to the patient. Psychoeducation on sexual reactions, anatomical structure of the intimate parts of the body, debunking myths about sexuality may occur at this stage. Once the next stage is reached, the sexological diagnosis should be deepened and further treatment should be planned taking into account the specifics of the treatment of the specific dysfunction (e.g. choice between partner and individual therapy, behavioural therapy, cognitive therapy). The next stage is the time of the actual therapy, which is based on techniques and methods that target the causes of the sexual disorder and the factors that maintain the disorder. This model is still being developed, and in 2006 it was updated to EX-PLISSIT, in which it is crucial to obtain consent from the patient to proceed to the different stages, thus providing an opportunity to assess the patient's readiness in the treatment process.

### Cognitive behavioural psychotherapy for female patients with hypolibidemia

Cognitive-behavioural therapy integrates 2 approaches: cognitive, which refers to mental processes; and behavioural, which is rooted in learning and conditioning theory, and therefore focuses mainly on behaviour. The basic premise of cognitive psychology is that there is a common denominator in

emotional problems and mental disorders, which is the presence of characteristic automatic thoughts, distortions, and cognitive patterns that influence mood (emotions) and behaviour [27]. It should be emphasised that, according to this concept, humans perceive reality by making meaning (thoughts). There is a special type of thoughts, the so-called *automatic thoughts*, which are spontaneous, generally unconscious, carrying a considerable emotional charge and appearing in response to a specific stimulus. Their content is largely adopted uncritically by the person in question. It is possible to "extract" this type of interpretation, which is largely the focus of cognitive therapy [28]. Automatic thoughts find their source in *Beliefs*, of which 2 types can be distinguished:

- Core beliefs contain implicit knowledge about oneself (the Self), other people and the surrounding reality. They are rigid and general, usually expressed in the form of unconditional sentences (e.g. "I am hopeless", "Other people hurt", "The world is unpredictable");
- Mediating beliefs are more 'accessible' than core beliefs. They refer to rules of conduct (e.g. "One must not rely on others"), shoulds (e.g. "I should always control myself") and conditional beliefs, which most often take the form of "If... then..." assumptions, e.g. "If I am a woman and I initiate sex, this proves me to be promiscuous".

At the heart of the cognitive-behavioural approach is the assumption that lasting and meaningful change can be brought about by working on maladaptive beliefs, resulting in a change in patterns of thinking, emotions, and behaviour. In working with sexual dysfunctions, it is necessary to isolate negative sexual beliefs, i.e. beliefs that contain cognitive distortions (thought errors) and are in the nature of myths or stereotypes about sex. It is helpful to use the ABC model (Fig. 3), in which an automatic thought arises from the interpretation of a situation, the consequences of which are the emotions, physiological reactions, and behaviour that occur.

Clearly, when the belief "A woman should not fantasise about sex" is present in a patient, this will influence the emergence of a negative automatic thought that will trigger a dysphoric mood and induce withdrawal from situations of a sexual nature, thus increasing the risk of hypolibidemia occurring or sustaining.

The essence of cognitive-behavioural therapy is to create conceptualisations — a conceptual framework that allows the therapist to understand the

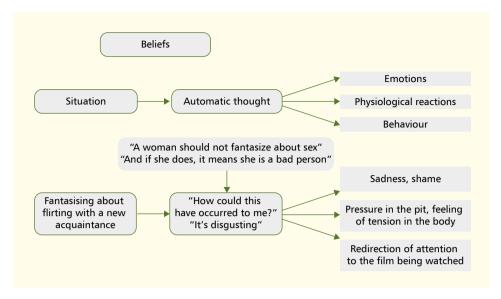


Figure 3. ABC model of a patient suffering from hypolibidemia

patient [28, 29]. The aim of conceptualisation is to find answers to questions about the following:

- how can we define the patient's difficulty?
- what are the patient's actual problems, what are their origins, and what can sustain them?
- what maladaptive thoughts and beliefs are associated with the reported difficulty, and what consequences (emotions, physiological reactions, behaviour) might this cause?

The process of building up conceptualisation is extended over the course of the therapy and is based on making hypotheses about the development of a specific dysfunction. It is worth mentioning that the conceptualisation is based on cognitive models of the dysfunction and on information contributed by the patient, who in this case is the "expert" in seeing her problem. The process of understanding the genesis and existence of the dysfunction should be reviewed with the patient at different stages of therapy.

In CBT therapy, an important role is played by the definition of the goal, which gives direction to the therapeutic work. It provides a reference point for planning therapeutic interventions, including the self-work tasks that the patient carries out between sessions. It is important that the goal is specific, measurable, attractive to the person, realistic, and time-bound. In this way, the use of different types of measurements and subjective scales makes it possible to determine the effects of therapy. This is important because the cognitive-behavioural approach strives to meet treatment standards and thus requires evidence-based (empirical data), measurable phenomena and verifiability [29].

Self-work in the therapy of sexual dysfunctions is of particular importance. It helps to build a sense of empowerment in the patient for change. There is a whole spectrum of possibilities for the proposed tasks to be carried out. It is important that, for both therapist and patient, the purpose of the exercise is clear and defined, and that it is justified by the patient's conceptualisation.

Cognitive restructuring, behavioural experimentation, assertiveness training, working with cognitive distortions, psychoeducation — these are just a small part of what the cognitive-behavioural approach offers. The multitude of techniques makes it possible to tailor the therapy to the needs of the individual patient based on the conceptualisation of her problem.

## Treatment plan for hypolibidemia in women in a cognitive-behavioural approach

The course of therapy for female patients complaining of loss of interest in sex can be divided into several stages, some of which happen in parallel [30–33]:

- 1. Establishing contact, creating a safe environment to talk about intimate topics.
- 2. Taking a history (it may be helpful to refer to the list in Table 1).
- 3. Ordering tests that could rule out a physiological cause (e.g. hyperprolactinaemia). Treatment of co-morbidities, if any.

- Creating a conceptualisation of the patient's problem, which will be reviewed at each stage of the therapeutic work:
  - a) Define the problem the patient is presenting with — determine whether a diagnosis of hypolibidemia is possible. Are there other problems besides sexuality?
  - b) Determine the extent to which the lack or loss of sexual needs is a significant problem for the patient and what her motivation to change is (It is worth noting that the majority of patients complaining of loss or lack of sexual needs come to the therapist's office at the encouragement of a partner, without a clear desire to change for themselves. This information will influence further stages of therapy).
  - Identification of factors contributing to the onset of hypolibidemia and factors sustaining the existence of dysfunction.
- 4. Formulating objectives for the work.
- 5. Psychoeducation:
  - a) Concerning the cognitive model and learning to identify negative automatic thoughts, recognise emotions and physiological reactions.
  - b) Concerning sexuality: the specifics of sexual desire including the distinction between spontaneous and receptive desire; the dual control model and the identification of inhibitors and drivers affecting sexuality; the sexual response cycle in women (Fig. 1); the mechanism affecting the emergence of sexual dysfunctions (Fig. 2); the anatomical structure of women and/or men and the physiology of sexual response; the phenomenon of incompatible arousal.
- 7. Cognitive work:
  - a) Identifying myths and cognitive distortions about sexuality and restructuring dysfunctional beliefs about sexuality.
  - b) It may be good practice to create a list of maladaptive thoughts that concern the patient, her partner/partner, as well as the sexual activity itself. For example, it may be to discover the belief: "sex is an unpleasant chore". Such thinking can contribute to the emergence of catastrophising: "for sure [during sex] it will be unpleasant, I won't like it". By discussing the automatic thoughts, it will be possible to create an alternative thought with a more adaptive function, e.g. "sex can give a lot of pleasure if I commit myself".
  - c) SIS and SES\* analysis.

- d) Analysing arousal contexts looking retrospectively at desire in earlier situations, if present. Providing answers to sample questions: What was the situation? How did I feel mentally and physically? What did I enjoy? What was meaningful to me in the partner person? How do I assess the quality of the relationship with the partner person at that time? What were the circumstances of the rapprochement? What specifically did the sexual activity consist of?
- e) Describing the individual patient's sexual response cycle, taking into account the factors influencing her desire.
- f) Planning strategies to reduce symptoms, e.g. finding a balance between work and rest, searching together with the patient for areas that involve the experience of pleasure; looking for stimuli to arouse sexual desire (literature, films, sensory stimuli, fantasies).

### 8. Behavioural work:

- a) Bibliotherapy recommending to the patient reliable literature on sexuality in an accessible form, e.g. Come as you are by Emily Nagoski or Intimacy Workshops by Agnieszka Szeżyńska. It is important that the therapist is familiar with the item before recommending it and knows the reason for which he or she is recommending a particular publication with the patient's conceptualisation in mind. Recommending books without knowing the book may prove counterproductive or even harmful. There are 2 books available on the US market whose effectiveness in the treatment of hypolibidemia has been confirmed by research [34]: Reclaiming Your Sexual Self: How You Can Bring Desire Back into Your Life by Kathryn Hall and A Tired Woman's Guide to Passionate Sex by Laurie B. Mintz<sup>3</sup>. In addition, the form of bibliotherapy may include items of an erotic nature to stimulate the imagination and secondarily increase sexual arousal [35].
- b) Masturbation training aims at becoming familiar with one's own body, learning about preferred touch, expanding one's repertoire of sexual behaviour.
- c) Self-stimulation training which does not focus on the sexual sphere, but on feeling pleasure from one's own touch, e.g. lotioning the body in a conscious and attentive way.
- d) Relaxation techniques.
- e) Imaginative techniques.

<sup>&</sup>lt;sup>3</sup>None of them has been translated into Polish.

Table 1. List of areas to be investigated during the interview collection (own elaboration based on [17])

| Action  | Area to be explored  |
|---|--|
| Ordering a gynaecological examination   | Exclusion of lesions and pain dysfunctions.  |
| Ordering a blood test and hormonal tests  | Blood count, TSH, prolactin, testosterone, cortisol.   |
| Taking a general health history   | Thyroid disorders (hypothyroidism, Hashimoto's hyperthyroidism); neurological diseases; oncological diseases including history of radiotherapy and/or chemotherapy; tetany; diabetes mellitus; urinary incontinence; MRKH syndrome; history of pelvic surgery; current or past pregnancy; history of puerperium, if any; medications taken (including psychiatric medications, e.g. antidepressants, neuroleptics; antiandrogens); use of stimulants (alcohol, drugs, addictions); physical activity; diet; presence of HIV/AIDS; presence of venereal disease; genital infections; menopause; endometriosis.  |
| Exclusion of other disorders  | Anxiety disorders, mood disorders, eating disorders, PTSD, insomnia.   |
| Taking a history of ge-<br>neral mental state   | Fatigue; perceived stress; fear of sex; guilt; self-perception as a sexual partner; self-esteem; beliefs about sex; ability to relax; attitude towards one's body (possibly feeling unattractive); knowledge of one's sexual preferences and needs; egodystonic homosexual orientation.  |
| Exploring sexological issues  | Psychosexual development; level of sexological knowledge; attitudes towards sex; beliefs about masturbation and sexual expression; previous sexual experiences; previous sexual dysfunctions (as well as experiences of pain, vaginal dryness + consider secondary incidence of disorders, e.g. dyspareunia increases the risk of loss of sexual desire); sexual initiation; beliefs about sex brought from home (e.g. sex as a taboo subject); satisfaction with sexual life; satisfaction with sexual contact (including verification of adequacy of sexual stimulation during intercourse); contraception used; previous motivation to engage in sexual activity (if present); sexual fantasies; pornography; past trauma including experience(s) of rape; reasons for not wanting to engage in sexual contact; availability of safe and intimate settings; (un)conducive sexual context. |
| Exploring the issue of<br>the partner persona<br>and perceptions of the<br>relationship | Relationship quality; level of trust and closeness; relationship history; ability to communicate sexual needs and discuss sexual topics; conflicts; stage of the relationship (e.g. falling in love, getting to know each other, appearance of a child, empty nest stage); type of relationship (e.g. partnership, patriarchal); arguments about sex; rivalry; family formation plan (fear of unwanted pregnancy); level of relationship satisfaction; partner norms. Elements related to the partner: level of sexual needs, sexual dysfunctions, addictions (including to pornography), violence used, lack of attraction, infidelity experienced.   |
| Investigating environ-<br>mental issues<br>and cultural context                         | Information on family of origin, attachment style, quality of relationships built with other people, sexual norms, media and moral messages about sex, religious rigour, cultural beliefs.   |
|   | Ordering a gynaecological examination Ordering a blood test and hormonal tests Taking a general health history  Exclusion of other disorders Taking a history of general mental state  Exploring sexological issues  Exploring the issue of the partner persona and perceptions of the relationship  Investigating environmental issues  |

### 9. Other therapy options:

- a) Mindfulness-based therapy allows one to focus on the "here and now" in a non-judgmental way. Helps to notice distractions and redirect attention to physical sensations without judging them (illustrated in Table 2).
- b) Partner therapy work aimed at resolving existing conflict within the couple; offering

tools for constructive communication. For self-work between sessions, techniques based on Sensate Focus training are recommended — the tasks to be performed in a couple consist of a gradual transition from touching neutral zones to intimate zones and ending with full intercourse. The tasks are performed in stages and are changed with the mutual consent of

those involved. This method is susceptible to modification. It is possible to discuss with the couple their needs and preferences, which can be woven into the framework of the "classic" Sensate Focus. It may be helpful to introduce communication coaching at an early stage to facilitate feedback in a kind and empathetic way. In partner therapy, where the reason for the request is reduced levels of desire, a key aspect to address is the difference in the occurring libido levels between the partners. In such a situation, psychoeducation is essential, which is covered in section 7 (see cognitive work). In couples therapy, there may be interventions aimed at planning time together that could be devoted to building intimacy and emotional closeness. In relationships where this is worked out, a repertoire of sexual behaviours can be built up to reduce routine and boredom and rekindle interest.

- 10. A summary of the changes that have taken place at earlier stages.
- 11. Relapse prevention using the knowledge gained in therapy, which can be used to recognise the signals indicating the development of a dysfunction, dealing with it, but also making every effort to reduce the risk of relapse by changing habits, taking care of life hygiene, etc.
- 12. Completion of therapy.

\*The Sexual Excitation System (SES) and Sexual Inhibition System (SIS) can be tested using the SESII-W-PL (Sexual Excitation/Sexual Inhibition Inventory for Women) questionnaire, which has been validated under Polish conditions and has shown good psychometric properties, and can therefore be successfully used in the female population between the ages of 18 and 55 years [36]<sup>4</sup>.

### Mindfulness-based approach in the treatment of sexual dysfunction

Mindfulness-based therapy originates from the so-called *third* wave, a development of cognitive-behavioural therapy. It has its origins in Buddhist meditation practices, which Jon Kabat-Zinn adapted into a Mindfulness-Based Stress Reduction (MBSR) programme [27]. The author defines mindfulness practice as a special kind of attention that is conscio-

<sup>4</sup>The Polish version of the SESII-W questionnaire (SESII-W-PL) can be downloaded: https://doi.org/10.1371/journal.pone.0249560.s002. us, non-judgmental and directed to the present moment [37]. Due to the successful use of mindfulness--based techniques in the treatment of depression and anxiety disorders, the effects on sexual dysfunction have begun to be investigated. In 2003, Lori Brotto and colleagues began a series of studies on the effectiveness and application of mindfulness practice (MBCT - mindfulness based cognitive therapy, an extended MBSR programme with elements of cognitive therapy) in the treatment of sexual dysfunctions: hypolibidemia, orgasmic disorders, and pain syndromes (dyspareunia, vaginismus, vulvodynia). Since then, an increasing integration of CBT and mindfulness in the treatment of sexual dysfunctions can be observed [38, 39]. In 2020, Lori Brotto and Julia Velten described a treatment algorithm for women with hypolibidemia [40], according to which, once a biological (medical) cause has been ruled out and the underlying cause of the problem has been shown to be psychological, cognitive restructuring using mindfulness-based and behavioural techniques can be offered to the patient. In some cases, partner therapy is indicated, due to the relational context of hypolibidemia. The treatment process requires psychoeducation, modification of unfavourable beliefs, and defining and adjusting expectations to make them realistic. In the course of treatment, interventions are directed towards seeking motivating factors for rapprochement, identifying adequate stimulation, and a supportive context. In the study, the authors emphasise that mindfulness allows one to learn to be in the sexual experience "here and now", to build a connection between body and mind, and is a response to the difficulty of distraction.

It is worth noting that there are important differences arising from cognitive-behavioural versus mindfulness-based approaches. In cognitive-behavioural therapy, the aim is generally to change negative automatic thoughts, e.g. if a person with hypolibidemia discovers thoughts of "there must be something wrong with me", then the intervention may encourage the person to challenge such a thought by identifying cognitive distortions and seeking arguments (evidence) for and against the validity of the thought. In contrast, MBCT can foster non-judgmental awareness of the thought, recognising that it is "just a thought" and not an objective truth, and redirect the patient's attention to her current physical sensations. MBCT encourages curiosity about one's state and acceptance of all aspects of the current experience, including emotions such as anxiety or sadness.

Table 2. Own elaboration based on [41]

| Factor influencing<br>the onset of sexual<br>dysfunction | Example   | Mindfulness  | Example   |
|--|---|--|---|
| Location of the remark                                   | <ul> <li>Focus on appearance</li> <li>Focusing on signals indicative of excitement that one does not accept</li> </ul>  | <ul><li>Careful awareness</li><li>Turning the unpleasant into the neutral</li></ul>                    | <ul> <li>Recognising distractions</li> <li>Redirecting attention<br/>to physical sensations<br/>without evaluating them</li> </ul>      |
| Negative sexual pat-<br>terns                            | <ul><li>Seeing oneself as "flawed"</li><li>Associating one's sexual reactivity with shame</li></ul>   | <ul><li>— Increased awareness of sexual reactivity</li><li>— Self-acceptance</li></ul>                 | Noting earlier ignored physiological reactions  — Acceptance of current difficulties without interpreting them as general indicators    |
|  | Anticipating that it will not be possible to feel desire during sex   | Focusing on the here and<br>now<br>+ Working on a task-based<br>approach                               | <ul> <li>Letting go of targets</li> <li>Focusing on current<br/>sensations rather than<br/>anticipating what will<br/>happen</li> </ul> |
| Avoiding   | <ul><li>Use of excuses</li><li>Focusing on a to-do list</li></ul>   | Increasing commitment  | <ul> <li>Engaging in sex despite anxiety</li> <li>In a situation of distraction, returning to the "here and now"</li> </ul>             |
| Negative beliefs concerning sex                          | <ul> <li>"I am a hopeless sex partner"</li> <li>Acknowledging a thought as true and citing evidence to support it</li> </ul>  | <ul><li>Meta-view</li><li>Looking from a distance</li></ul>  | Noticing the thought and re-<br>alising that it is just a thought<br>and letting it go  |
| Relational context                                       | <ul> <li>Inability to talk about sex, preferences, needs, concerns</li> <li>Perception of low drive in partner/partner as an indicator of lack of affection/attractiveness</li> </ul> | <ul> <li>Improving communication</li> <li>Reduced emotional reactivity during conversations</li> </ul> | <ul> <li>Accepting emotions</li> <li>Instead of challenging concerns, talking about them</li> </ul>                                     |

Kyle Stephenson, in one of his articles, compiled the factors influencing the emergence of sexual dysfunctions together with a proposal for the use of mindfulness-based techniques (Tab. 2) [41]. Therapeutic interventions focus on the elements identified in the theoretical model explaining the emergence of sexual dysfunctions together with the factors that sustain them. They therefore focus on unhelpful thoughts and beliefs, negative effects, maladaptive coping strategies, and the relational aspect.

### Conclusions

Human sexuality is closely linked to human existence [10]. The way it is understood, defined, and described is undergoing dynamic changes. Since the 1960s, one can observe an increased interest in

sexuality in its broadest sense, and at the same time in the various types of problems that people may experience in this aspect of life. This has resulted in emerging theoretical models explaining the process of sexual dysfunctions, including the factors that sustain them and the creation of a profile of people at risk of experiencing difficulties in their sexual lives. Sexological models are constantly being updated with new reports from different scientific disciplines: physiology, neurology, cognitive psychology, gynaecology, urology, etc. The integration of these disciplines provides an opportunity to create a support offer for those who need it. It is worth noting, however, that the creation of a single, coherent protocol that is adequate in the treatment of all sexual disorders is a breakneck task [42]. When working with a person suffering from emerging sexual difficulties, it is

important to remember to tailor interventions to the individual patient, rather than the other way around. Referring to theoretical models is helpful, while it is also important to recognise the subjectivity of the person seeking help.

The cognitive-behavioural approach offers a range of possibilities in therapeutic work with female patients experiencing problems with desire. Interventions targeting the cognitive (thoughts, cognitive distortions, beliefs, emotions) and behavioural (behaviours, coping strategies undertaken) spheres have promising effects, which have been confirmed by numerous studies. Furthermore, integrating them with new forms of therapy (third wave), such as mindfulness approaches, for example, increases the repertoire of techniques and thus offers the chance to improve where other techniques may have been insufficient.

In psychotherapeutic work aimed at treating hypolibidemia, it is important to remember to consider the wider context rather than focusing on eliminating the dysfunction. It may be helpful to refer to the metaphor in which it is the person experiencing leg pain who reaches for the painkiller, thus acting on the symptom of the problem rather than the cause. Both in this case and in therapeutic work, it is necessary to understand the source of the problem to be able to propose and implement an adequate treatment. For this reason, the cognitive-behavioural approach uses conceptualisation, which is a set of hypotheses about the source of the problem and the factors that sustain it. Thus, in addition to symptom reduction and improved functioning, the goals of therapy should also include relapse prevention – using the lessons learned from therapy to reduce the risk of sexual dysfunction returning in the future. In the treatment of sexual dysfunction, it is also necessary to address relational aspects, because it is in this context that sexual problems most often become apparent.

### Article information and declarations

### Funding

None.

#### Conflict of interest

The author declares no conflict of interest.

### References

 Izdebski Z. Seksualność Polaków na początku XXI wieku. Studium Badawcze. Wydawnictwo Uniwersytetu Jagiellońskiego, Kraków 2012: 261–263.

- Jakima S. Dysfunkcje seksualne. Poradnik dla lekarzy, PZWL, Warszawa 2019: 75–83.
- Morrison J. DSM-5 bez tajemnic. Praktyczny przewodnik dla klinicystów. Wydawnictwo Uniwersytetu Jagiellońskiego, Kraków 2016: 398–399.
- Levine SB. The nature of sexual desire: a clinician's perspective. Arch Sex Behav. 2003; 32(3): 279–285, doi: 10.1023/a:1023421819465, indexed in Pubmed: 12807300.
- Iniewicz G, Strzelczak A. Pożądanie w odpowiedzi nowe spojrzenie na hipolibidemię u kobiet. Psychiatr Pol. 2013; 47(6): 1123–1132.
- Holka-Pokorska J. Psychologia i fizjologia reaktywności seksualnej u kobiet In: Lew-Starowicz Z. Seksuologia. In: Lew-Starowicz Z. ed. Seksuologia. PZWL, Warszawa 2018: 64–70.
- Basson R. Zaburzenia pożądania i wzbudzenia seksualnego u kobiet. Psychiatria po Dyplomie. 2009; 6(1): 10–20.
- Association of Reproductive Health Professionals (ARPH)

   What You Need to Know. Female Sexual Response.
   www.arph.org/factsheets (17.04.2023).
- Holka-Pokorska J. Zaburzenia pożądania i podniecenia seksualnego u kobiet. In: Lew-Starowicz Z. ed. Seksuologia. PZWL, Warszawa 2018: 218–231.
- Bancroft J. Seksualność człowieka (Human sexuality and Its Problems (3rd ed). Edra Urban & Partner, Wrocław 2009.
- Pridal CG, LoPiccolo J. Wieloczynnikowa terapia zaburzeń pożądania. Integracja terapii poznawczej, behawioralnej i systemowej. In: Leiblum SR, Rosen RC. ed. Terapia zaburzeń seksualnych. GWP, Gdańsk 2005: 79–122.
- 12. Pużyński S, Wciórka J. Klasyfikacja zaburzeń psychicznych i zaburzeń zachowania w ICD- 10. Badawcze kryteria diagnostyczne. Uniwersyteckie Wydawnictwo Medyczne "Vesalius" Instytut Psychiatrii i Neurologii, Kraków 1998.
- ICD-11 criteria. https://icd.who.int/browse11/l-m/en#/http%3a%2f%-2fid.who.int%2ficd%2fentity%2f1189253773 (20.04.2023).
- 14. Lew-Starowicz Z. Psychoseksuologia. GWP, Sopot 2022.
- 15. Gałecki P, Święcicki Ł. Kryteria diagnostyczne z DSM-5 Desk reference. Edra Urban&Partner, Wrocław 2020: 198–199.
- 16. Siekierska M, Kowalczyk R, Merk W. Charakterystyka osób aseksualnych. Seksuol Pol. 2016; 14(1): 25–30.
- 17. Bartlik B, Goldberg J. Zaburzenia pobudzenia seksualnego u kobiet. In: Leiblum B, Rosen RC. ed. Terapia zaburzeń seksualnych. GWP, Gdańsk 2005: 107–122.
- Tavares IM, Moura CV, Nobre PJ. The role of cognitive processing factors in sexual function and dysfunction in women and men: a systematic review. Sex Med Rev. 2020; 8(3): 403–430, doi: 10.1016/j.sxmr.2020.03.002, indexed in Pubmed: 32402763.
- 19. Nobre PJ, Pinto-Gouveia J. Cognitive and emotional predictors of female sexual dysfunctions: preliminary findings. J Sex Marital Ther. 2008; 34(4): 325–342, doi: 10.1080/00926230802096358, indexed in Pubmed: 18576234.
- 20. Nobre PJ, Pinto-Gouveia J. Dysfunctional sexual beliefs as vulnerability factors to sexual dysfunction. J Sex Res. 2006; 43(1): 68–75, doi: 10.1080/00224490609552300, indexed in Pubmed: 16817069.
- 21. Nobre PJ, Pinto-Gouveia J. Cognitive schemas associated with negative sexual events: a comparison of men and women with and without sexual dysfunction. Arch Sex Behav. 2009; 38(5): 842–851, doi: 10.1007/s10508-008-9450-x, indexed in Pubmed: 19191018.
- Nobre PJ, Pinto-Gouveia J. Emotions during sexual activity: differences between sexually functional and dysfunctional men and women. Arch Sex Behav. 2006; 35(4): 491–499, doi: 10.1007/s10508-006-9047-1, indexed in Pubmed: 16909318.

- Kane L, Dawson S, Shaughnessy K, et al. A review of experimental research on anxiety and sexual arousal: Implications for the treatment of sexual dysfunction using cognitive behavioral therapy. J Exp Psychopathol. 2019; 10(2), doi: 10.1177/2043808719847371.
- 24. Oettingen J. Dysfunkcje seksualne podejście oparte na teorii poznawczej. Seksuol Pol. 2013; 11(2): 68–75.
- 25. Meyers M, Margraf J, Velten J, et al. Large group exposure treatment: a feasibility study of exposure combined with diaphragmatic breathing in highly dental fearful individuals. Front Psychol. 2016; 7(9): 2007–2484, doi: 10.3389/fpsyg.2016.02007, indexed in Pubmed: 28111556.
- Jakima S, Małachowska E. Psychoterapia w leczeniu zaburzeń seksualnych. In: Lew-Starowicz Z. ed. Seksuologia. PZWL, Warszawa 2018: 344–347.
- 27. Popiel A, Pragłowska E. Psychoterapia poznawczo-behawioralna. Teoria i praktyka (2nd ed). PWN, Warszawa 2022.
- Beck JS. Terapia poznawczo-behawioralna. Podstawy i zagadnienia szczegółowe. Wydawnictwo Uniwersytetu Jagiellońskiego, Kraków 2012.
- 29. Kitłowska M. Założenia psychoterapii poznawczo-behawioralnej. In: Rawińska M. ed. Zaburzenia seksualne a psychoterapia poznawczo-behawioralna. PZWL, Warszawa 2019: 3–15.
- Rawińska M. Terapia seksualna. In: Rawińska M. ed. Zaburzenia seksualne a psychoterapia poznawczo-behawioralna. PZWL, Warszawa 2019: 17–36.
- 31. Bilejczyk A, Bilejczyk A, Pogorzelska M. Psychoterapia zespołów bólowych u kobiet. In: Rawińska M. ed. Zaburzenia seksualne a psychoterapia poznawczo-behawioralna. PZWL, Warszawa 2019: 289–310.
- 32. Cysarz D. Zaburzenia seksualne a terapia poznawczo-behawioralna. Seksuol Pol. 2012; 10(1): 41–45.

- 33. Zaklińczyńska H. Rawińska M. In: Rawińska M. ed. Zaburzenia seksualne a psychoterapia poznawczo-behawioralna. PZWL, Warszawa 2019: 219–229.
- 34. Balzer A.M. Efficacy of bibliotherapy as a treatment for low sexual desire in women. (Unpublished doctoral dissertation). University of Missouri, Columbia, 2012: 87-89.
- 35. Chatzipentidis K. Zastosowanie biblioterapii w leczeniu zaburzeń seksualnych. Doniesienia z wybranych badań. Przegląd Biblioterapeutyczny. 2014; IV(2).
- 36. Nowosielski K, Kurpisz J, Kowalczyk R. Sexual inhibition and sexual excitation in a sample of Polish women. PLoS One. 2021; 16(4): e0249560, doi: 10.1371/journal.pone.0249560, indexed in Pubmed: 33822822.
- 37. Kabat-Zinn J. Praktyka uważności dla początkujących. Czarna Owca, Warszawa 2021: Warszawa.
- 38. Stephenson KR, Kerth J. Effects of mindfulness-based therapies for female sexual dysfunction: a meta-analytic review. J Sex Res. 2017; 54(7): 832–849, doi: 10.1080/00224499.2017.1 331199, indexed in Pubmed: 28617103.
- 39. Brotto LA. Better Sex through Mindfulness. How women can cultivate desire. Greystone Books, Vancouver 2018.
- Brotto LA, Velten J. Principles and practise of sex therapy: Sexual Interest/Arousal Disorder in Women. In: Hall KSK, Binik YM. ed. Principles and Pracrtise of Sex Therapy (6th ed). Guilford Press, New York 2020: 13–40.
- 41. Stephenson K. Mindfulness-Based Therapies for Sexual Dysfunction: a Review of Potential Theory-Based Mechanisms of Change. Mindfulness. 2016; 8(3): 527–543, doi: 10.1007/s12671-016-0652-3.
- 42. Leiblum SR, Rosen RC. Terapia zaburzeń seksualnych. GWP, Gdańsk 2005.