

Disability vs the sexual life of women - selected issues

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Sex refers to a set of somatic and mental characteristics. The former are determined according to three criteria: gender, external and internal genital organs, and tertiary sex characteristics (breast, specific hair, specific fat distribution, body proportions), the latter distinguish women from men. Every single person experiences problems related to sex - in childhood, adolescence, maturity, old age. In women, these issues are particularly complex at each stage of development. Additionally, during pregnancy, gynaecologists should discuss sexual health with their patients. The sexual health of women with disabilities is a special issue in this respect. Disabilities are a serious social and health problem in both urban and rural agglomerations. Sexual health problems, in the light of these aspects, should also be the task of rural medicine.

Keywords

Gynaecology; Sexology; Health

1. Introduction

According to WHO (World Health Organisation), sexual health is the integration of the biological, emotional, intellectual and social aspects of sexual life, being essential for the positive development of personality, communication and love. Disabilities are a serious social and health problem in both urban and rural agglomerations. Disabilities also impinge on functioning in the sexual sphere. Sexology, as the science of sex, has an interdisciplinary character, presenting human sexuality in psychological, sociological, pedagogical, ethical-moral, legal, ethnographical, anthropological, biological, religious and medical aspects, as human sexual life takes place at the biological, mental and social levels.

Human efforts to satisfy "sexual needs" are complex and involve a variety of mechanisms that go far beyond sexuality itself. Women's sexuality is considered particularly complicated, characterised by stages and specificity, e.g. during pregnancy [1-7].

Sex refers to a set of characteristics that distinguish women from men, and is inextricably linked to the entire personality of a person. It is often emphasised that from a phylogenetic perspective, eroticism, involving sexuality and the spheres of feelings, intellect and the psyche, is mentioned only in the case of the human race. From the biological point of view, sexuality appears at the stage of phylogeny of organisms, where nerve cells cooperate in the reproductive process and contribute to the meeting of two germ cells coming from the different sexes [2-4]. Thus, the essence of sexuality is in the processes leading to fertilisation, steered by the nervous system and activated by the specific affinity of organisms, related to their bipolar sexual differentiation. Human sexual development begins at the time of sexual determination, so at the time of genotypic establishment, i.e. chromosomal sex. Increased sexual activity during puberty is caused by a dynamic neuroendocrine development in the brain, leading to somatic, mental and emotional development. In this period, the dynamic development of the centres and mechanisms of regulation of sexual responses begins [1-6].

Stark distinguishes the following three levels in the regulation of sexual processes:

central level - in the central nervous system (the limbic system, hypothalamus, pituitary, cerebral cortex);

glandular level - transport level, ensuring the secretion of hormones essential for shaping and maintaining the functional properties of target tissues, and for carrying hormones to these tissues;

peripheral level - target tissues and the processes related to transmitting hormonal information.

Regulation of sexual functions via the central nervous system is based upon neurohormonal feedback mechanisms between receptors and effectors [3-7].

Behaviours, feelings and sexual responses are integral ele-

ments of neurophysiological - neurohormonal - processes in the brain. These processes are closely related to the functioning of the hypothalamus-pituitary-gonad axis.

The basis for sexual responses and reproduction is the communication system regulating the processes that constitute morphological, physiological, biochemical and mental processes [2–7]. Female sexual arousal manifests itself as an increase in vaginal lubrication, engorged clitoris, increased heart rate, accelerated breathing, and increased blood pressure.

2. Disabled people vs sexuality

In 1980, the World Health Organisation defined disability in the International Classification of Functioning, Disability and Health, as:

impairment - any loss or abnormality of physiological, psychological or anatomical structure or function;

disability - any restriction or lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered normal for a human being;

handicap - the result of an impairment or disability that limits or prevents the fulfilment of a role in life relative to a peer group.

Considering the kind of physical or mental disorders, as well as the possibilities of functioning of people with disabilities, this definition distinguishes 3 basic types of disabilities [8]:

sensory - e.g. a person who is blind, visually impaired, deaf, hearing impaired, or deaf-blind,

physical - impairment of locomotive organs, chronic diseases of internal organs,

mental - reduced mental capacity characterised by impaired perceptual, cognitive and mental processes in relations to a state considered normal [8].

According to the results of the European Health Interview Survey (EHIS), in 2014, about 7,689,800 biologically disabled persons lived in Poland, namely “people who declared limited capacity to perform the activities usually performed by people (pursuant to the uniform UE definition), including both severe and less serious limitations to perform the aforementioned activities for at least the past 6 months” [9].

The issue related to the right to be a mother/wife in the context of disability is extremely rarely discussed in Polish society and in medical literature. A great number of disabled women experience a range of attitudes towards their sexuality and sexual life [10].

In people with sensory impairment below the level of a spinal cord injury (SCI), the ability to discover the erogenous zones (so-called body mapping) and to stimulate them optimally with the use of appropriate contact, direction and variability of tactile stimuli, is one of the most important factors of sexual adaptation in partners. The sensitivity of erogenous zones can be developed independently (intuitively) or by using special exercises and training conducted by sexologists.

Despite their physical limitations, people with disabilities

have not lost the ability to feel and experience, and do not differ from healthy people in this respect. They have the same needs, desires and problems. They want and strive to maintain sexual relationships, although not necessarily physical ones. Those people do not feel the subjective sexual desire and satisfaction they used to feel before their injury. Despite the physical dysfunction, their psychosexual meeting of sexual needs remains at the same level. If a person after a spinal cord injury has begun to deal with the situation mentally and emotionally, then they should focus on learning to live with the disability, also in terms of their erotic life [11].

When it comes to people with disabilities, in many cases the aetiology of the disorder is multifactorial and stems from the type of injury, the type of personality, previous sexual experiences, attitude toward sexual disorders (complexes, fears, lower self-esteem etc.), relations in emotional relationship, as well as access to information and assistance.

In men with SCI, a decreased ability to ejaculate, no ejaculation, erectile dysfunction and reduced fertility are observed. Some sexual activities may be difficult or impossible. Apart from achieving and maintaining an erection, sexual intercourse requires many other factors. The male physiological sexual response consists of an erection, emission, ejaculation and orgasm. Feeling the orgasm is associated with subjective sensations that result from emission and ejaculation. Although the occurrence of an orgasm does not affect male reproductive abilities, problems with the erection, particularly with ejaculation, are the cause of infertility. Despite the fact that most men with a complete or incomplete spinal cord injury are able to achieve erection, it is usually a partial erection [11].

The majority of women after an injury maintain their physical ability for intercourse. In some women, decreased vaginal lubrication has the most negative impact on sexual intercourse. Fluid from the vagina facilitates penetration, while a lack results in damage and pain during intercourse. Nevertheless, there are products that may replace natural fluids. Water-based lubricants are most recommended. One should never use oil-based lubricants. As female orgasms vary in type and intensity, it is difficult to say if SCI has any influence on the ability to achieve orgasm. Following SCI, as a traumatic experience, a woman's menstrual cycle usually stops. Such a break may last up to even 6 months. When the menstrual cycle returns, the ability to conceive is not affected. If menstruation has not returned, women should contact a doctor who will recommend appropriate therapy.

3. Pregnancy and postpartum

There are many reports saying that women's libido, mood and appetite change during pregnancy [12–16]. Pregnancy and labour are a completely new situation for a woman, also in the context of the functioning in the psychosexual sphere, that significantly contribute to changes in mood and libido, favouring anxiety [12, 13, 17–19]. Gynaecological and obstetric care should also include sexology and nutritional as-

pects. Pregnant women's fears include e.g. fear of the course of pregnancy and the baby's health, fear of labour, fear of the ability to breastfeed, or fear of taking care of the baby. These fears generate defence responses: muscle tension increases, which may cause pain, creating the so-called "vicious circle mechanism" - pain increases fear. It is obvious that women who experience this state feel no desire to have sex - their libido and sexual activity decreases, which has a negative impact on partner relationships and worsens their mood. Literature data and our own observations confirm an individual approach to sexual activity during pregnancy [12–15].

Following postpartum, the improvement of mood, libido and sexual sensations is usually observed. However, many women point out that they have not returned to pre-pregnant levels in this respect. This indicates the necessity for sexological care for those women, and paying attention to the sexology issue by obstetricians and gynaecologists.

A lot of authors pay attention to this aspect. Our own observations and several reports mention a positive influence of sexual activity during pregnancy on partner relationships, unless there are obstetric contraindications. As stated in our own observations and literature, limited sexual activity causes frustration and misunderstandings between partners, which justifies the need for sexological care during pregnancy, often partner care [12–14, 16, 17].

In sexual and partner relationships during pregnancy, the women's emotional attitude matters, which is associated with a general lower mood that has a negative impact also on the sexual sphere. The negative influence of progesterone on mood and libido is emphasised here as well. In the first trimester, sexual intercourse is possible in nearly any individual modification of the partners' body position. The belly is still flat and does not interfere with sexual life.

In the second trimester, blood flow to the area of small pelvis increases, which significantly facilitates intercourse and sexual satisfaction achievement. Nearly any modification of the partners' body position during intercourse are acceptable, provided it does not put pressure on the belly.

As the study indicates, in the case of pregnancy without complications and with a willingness to maintain sexual activity in the last trimester, it is necessary to modify the sexual positions to those most safe, i.e. the woman lying on her side, back to the man, leaning away from him, with her knees bent.

The belly is safe and does not interfere with sex. This is one of the best and safest positions during intercourse in the third trimester.

Sexual intercourse in women, with the proper course of pregnancy and no contraindications, does not have a negative impact on the foetus [16].

Problems with mood and the functioning in the sexual sphere do not disappear after giving childbirth - decreased libido, baby blues, postpartum depression and postpartum psychosis are the most common emotional disorders in women in the postpartum period [12–14, 17–20].

Thus, pregnancy creates new conditions for women, also

in terms of the psychoemotional and sexual spheres, and is a source of a lot of stress and fear that can affect their sexual health.

In medical literature, there are very few reports in obstetrics regarding disability, and it has only been relatively recently that the issues related to perinatal care for women with disabilities were discussed on a broader scale. Studies by Mężyk *et al.* [21] on the experiences of obstetricians, and preparations for taking care of women with disabilities, are one of the few that have been carried out in Poland. Out of 205 obstetricians, 131 experienced taking care of a disabled woman. According to the obstetricians, medical health facilities are not adapted for taking care of disabled patients, while obstetricians feel a greater mental strain when taking care of patients with disabilities. Hoglound *et al.* [22] studied the knowledge, attitude and experiences of Swedish obstetricians taking care of mentally disabled women. They came to the conclusion that this kind of care differs from that toward able-bodied women, which has also been confirmed by McKay-Moffat *et al.* [23].

Therefore, it should be strongly emphasised that planning the pregnancy of a disabled woman should be multidimensional, starting with a prenatal care provider, through a specialist (depending on the kind of disability), to a Primary Health Care midwife. It is important that health care staff, particularly midwives, touching an extremely intimate sphere of women's nature, should be made aware of the special needs of disabled patients. Taking care of patients with disabilities requires from midwives time, patience, peace, calmness, empathy and a constructive approach to solving problems [24].

4. Gynaecological and sexological care of girls with disabilities

Paediatric and child gynaecology was separated from general gynaecology due to the distinctiveness of the physiology and pathology of the genital organs of patients in developmental age. This deals with patients from the neonatal period up to maturity, taking care of girls with both intellectual and somatic disabilities.

Although the proper course of development strongly determines the reproductive and sexual health of a mature woman, the importance of gynaecological care among children and teenagers remains underestimated in Poland. There is still a low percentage of girls under regular gynaecological care. Visits by girls to paediatric gynaecology clinics are most often associated with a significant disruption of the puberty period. Such a situation is connected with the socio-cultural conditions of our society, which make female reproductive health a very intimate area, neglected in social discussions. This view is also manifested among paediatricians who often omit gynaecological aspects in physical examination and medical history during periodic health examinations.

This negative phenomenon is even more intensified in the case of women with disabilities. Studies by Nosek

and Holand [25] included 504 physically disabled American women, most of them with spinal cord injuries, polio or cerebral palsy. These studies have shown that gynaecological examination, cytology and mammography were less frequently conducted among disabled women, compared to 445 able-bodied women.

The authors also drew attention to the frequent stereotyping among doctors, according to which the alleged lack of sexual activity of a disabled woman justified her lack of interest in reproductive health. This stereotype is obviously false.

Shah *et al.* [26], in turn, analysed the factors hindering access to gynaecological care for women with disabilities. This analysis shows that 42% of physically disabled women declared dissatisfaction with the quality of gynaecological visits [26, 27].

Our own observations conducted amongst a group of 30 women with physical disabilities showed that only 13.4 women underwent a gynaecological examination at least once a year. The fact that only 15% of those examined women had cytology performed is certainly not a reason for satisfaction. Moreover, subjective evaluation of the patient's relationship with the doctor indicated that 37% of those examined patients experienced total indifference of the health service to the gynaecological problems of women with disabilities, 23% met with a lack of understanding and necessary help on the part of the medical staff. Besides, nearly $\frac{3}{4}$ of the examined patients suggested the need for architectural and technical adaptation of gynaecological surgeries for disabled women, while 51% noted the need to broaden doctors' knowledge of problems specific to women with disabilities [28].

Architectural barriers are still a dominant factor limiting the accessibility of physically disabled women to gynaecological care in Poland. Most private surgeries are located in buildings that are not adapted for women with physical disabilities. This problem also applies to many hospitals that are in old buildings. Another important element is the lack of appropriate facilities for visually impaired women, which would allow them to maintain intimacy when reaching the gynaecologist surgery.

Another important factor is the information barrier. Unfortunately, Polish schools still do not fulfil their role in health promotion, such as in reproductive health.

The level of health awareness among Polish women with disabilities is much lower than the current lack of awareness among able-bodied women. Information barriers result both from a lower enrolment ratio of women with disabilities in relation to the general population. Numerous examples from social and political life indicate that Polish society is very traditional, also in relation to many stereotypes not present in EU countries for a long time. One of them is the alleged asexuality of a disabled person. An illusory effect of this stereotype is marginalisation of the gynaecological health prophylaxis, often encountered among educators and (unfortunately!!) among paediatricians and neurologists.

When discussing the barriers of accessibility to gynaecological care in the population of women with disabilities, one cannot fail to mention the financial barrier. The financial situation of families is much worse than the average level of wealth of Poles, and the disability itself generates additional financial burdens.

Studies carried out by Shah *et al.* [26] have shown that barriers to the gynaecological care of women with disabilities are also present on the part of gynaecologists. Most often, clinicians pointed out time constraints (39%), embarrassment in contact with a disabled patient (23%), insufficient skill and knowledge about disabled patients (14%), and the lack of surgery facilities (14%). The results of these studies encourage discussion of the specific character of medical history and a physical gynaecological examination among physically disabled women.

5. Summary

To sum up, every single person experiences problems related to sex - in childhood, adolescence, maturity, old age. In women, these issues are particularly complex at each stage of development. Additionally, during pregnancy, gynaecologists should discuss sexual health with their patients. The sexual health of women with disabilities is a special issue in this respect. Disabilities are a serious social and health problem in both urban and rural agglomerations.

Author contributions

P-R K., J-B G., M. P., M. M., K. W., and W.M. wrote the paper.

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Conflict of interest

The authors declare no conflict of interest.

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