Sex Disabil (2007) 25:93–109
DOI 10.1007/s11195-007-9046-8

ORIGINAL PAPER

Level of Knowledge about Sexuality of People with Mental Disabilities

Zdravka Leutar · Marija Mihoković

Published online: 12 July 2007

Abstract The paper examines the level of knowledge about sexuality of people with mental disabilities. The research also presents differences resulting from sex and the level of mental retardation. The sample included 24 persons with mental disabilities, who the author of this paper knew very well due to the time spent with them during a summer camp at a club in Vjeverica. Data was collected through direct interviews. Two types of questionnaires on sexuality of people with mental disabilities were used during these interviews. Results indicate that the level of knowledge about sexuality is not sufficient. Specifically low knowledge was shown in the area of the protection of sexual health such as sexually transmitted diseases and methods of protection. A relatively good level of knowledge was shown by the respondents in distinguishing between appropriate and inappropriate ways of sexual behaviour and social understanding of certain situational norms. Differences regarding sex and the level of disability were found. The results indicate the need for additional education on sexuality of both people with mental disabilities and their parents, along with support. Despite the fact that the research was conducted on a small occasional sample, it indicates that further research on this subject is needed.

Keywords Attitudes · Education · Level of knowledge · Mental disabilities · Sexuality

Introduction

Sexual awareness is reflected through observance and understanding of personal sexuality, attitude towards it, as well as a relationship towards sexuality in general. Starting with adolescence, due to the lack of appropriate educational influences, people with mental

Z. Leutar (✉) · M. Mihoković
Faculty of Low, Department of Social Work, The University of Zagreb, Nazorova 51, Zagreb 10000, Croatia
e-mail: zleutar@pravo.hr

disabilities very often feel unease, shame and fear, even guilt in relation to their sexual organs, sexual reactions and feelings which are part of the normal process of maturation.

During their youth and adult age, interest in their own sexuality, as well as a desire to experience sexuality increases. However, sexuality may still be accompanied with feelings of unease, fear and anxiety. Research in this area is not sufficient, confirmed by Bratković [1, 2]. In some research, the majority of respondents with mental disabilities expressed generally positive attitude towards their own sexuality, giving a great significance to it in their lives [3]. Nonetheless, it has been shown that the positive attitude is mostly directed towards certain forms of sexual expressions, and more specifically towards individual satisfaction of sexual needs or masturbation, in relation to others, which do not include sexual intercourse. Similarly, insecurity and lack of knowledge about various sexually transmitted diseases is present.

A series of research have shown negative attitude towards sexuality, which is connected to the lack of knowledge of various dimensions of satisfaction during intercourses, as well as expressed feelings of shame and fear in relation to sexuality [4, 5]. Respondents with mental disabilities very often describe sexual behaviour as "bad, indecent, dangerous, and forbidden," and they speak of it with unease. When explaining their attitudes, one can notice that attitudes of their environment are clearly reflected in them. Their experience of their own sexuality in terms of fear and insecurity results in the suppression of their own sexual needs and wishes, avoiding of themes about sexuality, or with ambivalence in relation to their own sexuality.

On the other hand, many persons with mental disabilities who have a positive attitude towards their sexuality do not have a sufficiently developed sense of responsibility and the need for the protection of dignity. This is connected to social skills about suitable behaviour that are not acquired and the lack of knowledge and information [6, 7].

Characteristics of sexual behaviour of persons with mental disabilities

Even though these definitions on sexuality refer to the whole population, which includes persons with mental disabilities, society is likely to view sexuality of these individuals solely as a problem. They talk about it with unease or ignore it [8–11].

Sexuality is an important part of growing up. Sexuality is reflected in every day of person's with mental disabilities in the same way as the life of the average population. Persons with mental disabilities have the same sexual needs as the average person. According to Mišić [12] some of them express low need for sexual expression, some higher than usual, and for the majority sexual needs belong to a middle category.

Considering the limited research in this area, it is difficult to reach any general conclusions about sexual behaviour of persons with mental disabilities. Haracopos and Pedersen [13] conducted research on markers of sexual behaviour of persons with mental disabilities and autism between the ages of 16–40, who were instutionalized. Results showed that among approximately 80% of the respondents, sexual expression exists. The most common way of sexual expression is masturbation, followed by non-direct signs of sexual behaviour directed towards others, such as holding hands, hugging, kissing and similar. The lowest numbers of the respondents express their sexuality directly, meaning that they touch intimate parts of their body and enjoy sexual intercourse. It was also shown that sexual behaviour of the respondents is often expressed in socially unacceptable manner. It was shown that the majority of respondents who masturbate do it in public, and that those who show signs of sexual behaviour towards others usually select those who are

not "the right persons": such as parents, professional experts, children and persons of the same sex. Among some respondents the connection between unacceptable social behaviour and unsolved sexual problems was determined.

Research on adolescences with Down Syndrome showed that a quarter of the respondents under 14 years of age show interests for the opposite sex and that after age 14 this number is doubled. It is interesting that the increased interest for the opposite sex of female respondents is equally present in both age groups. It should be noted that all these interests are passive in relationship interaction and implementation. Sexual needs are mostly satisfied by masturbation. However, masturbation is two times more common among male respondents [14].

Walter and Hoyler [15] concluded based on the interviews with 10 persons with moderate mental disability at the age between the ages of 22 and 46, that these individuals at the adult age have sexual wishes and needs. However, only two respondents did not have significant problems in this area. Unrealized sexuality, accompanied by fear and insecurity was present among all the respondents. Such experience of sexuality was reflected in repression of sexual needs, evading of topics relating to sexuality, fear from the opposite sex and evading of any sexual contacts. Ambivalence in terms of their sexuality was dominant. Research conducted on persons with developmental difficulties who are integrated in society showed that 65% of men and 82% of women have experience of sexual intercourse, but only a small number of them have a regular sexual life.

To conclude, if we want to summarize the results of limited research done in this area [16] one finds that persons with mental disabilities satisfy their sexual needs mostly via masturbation, and less via touch and sexual intercourse. It is very characteristic that people with mental disabilities often express their sexuality in an inappropriate or socially uncomfortable manner. Such phenomenon is not explained as a natural disorder, but as the lack of conditions or access to satisfy their sexual needs otherwise.

The most common type of public sexual expression is a public masturbation, or in other words masturbation that is not happening in an intimate space. Similarly, the expression of homosexuality may be the reflection of impossibility of satisfaction of needs of a person with mental disability within a heterosexual environment, which implies that the person may not be able to make contact with a person of the opposite sex or that there may not be conditions for such contact.

The main markers include difficulties in understanding their own sexuality and how to express it in interaction with a society. In spite of the fact that these difficulties are the result of disproportion of physical–biological and general psychosocial development, they are also connected with unfavourable conditions of everyday life, and the lack of possibilities to learn and acquire experience.

All these characteristic show that it is extremely important to pay attention to sexuality in a professional way, and to create positive attitudes. This is equally important when we think about satisfaction of needs and the right to be informed about specific issues.

Many problems are not the result of disability, but of the treatment and environment, which deals with these individuals from an early age. Thus, an atmosphere that negatively impacts upon the person to develop self-image, sexual identity, feeling of responsibility and self-confidence.

The aim of the research

The main aim of the research is to investigate the level of knowledge about sexuality of persons with mental disability.

Hypothesis

Basic hypothesis with which this research starts are the following:

1. The level of knowledge about sexuality of persons with mental disability is low.
2. There is a statistically significant difference in the level of knowledge about sexuality among the female and male respondents.
3. There is a statistically significant difference in the level of knowledge about sexuality if we take into account the level of disability.

Methodology of research

The research was conducted at the end of August through the beginning of September 2004. Research was done on joint summer holidays and on the premises of the club for persons with mental disability called "Vjeverica". The research was divided in two parts due to content. During the first part, the respondents answered the survey. The survey included questions relating to general and basic knowledge about sexuality. The second part of the research was done in the form of an interview, which included concrete situations relating to socio-sexual relations. The respondents answered the survey through an interview format. Some respondents needed additional explanation of questions and their simplification, related to specific terminology. Answering of surveys lasted approximately 45 min to an hour.

Sample

Sample of respondents included 24 persons with mental disabilities, 10 women and 14 men. The unequal number of males and females is due to the low interest of female respondents to answer the survey. They participate together in all activities in the club Vjeverica. The basic criteria for the selection of respondents were:

- Presence of mental disability as defined by the following criteria. Eighteen respondents are persons with mild mental disability and 6 respondents with moderate mental disability.
- An adult, or above 18 years of age. The age of the respondents is between 19 and 53, the average age is 32.

The sample included respondents who were familiar with the author and such a relationship facilitated ease of communication, mutual respect and trust. This was considered the most important precondition for the research on this subject. Almost all respondents are integrated in society and live in families.

Methods of acquiring the data—instruments of measure

To collect the data, the following instruments of measured were applied:

1. A list for evaluation of programmes of sexual education by B. Teodorović and D. Mišić [17] were adjusted to the needs of this research, and are called the questionnaire on sexuality.

2. Structured interview assessing the knowledge and attitudes by S. Heighway, S. K. Webster, I. M. Shaw, adjusted by Teodorović and Fulgosi Masnjak [18].

Questionnaire on sexuality is compiled from 11 summary variables of knowledge about various general questions on sexuality. The questionnaire includes yes or no questions, questions that have more that one correct answer, and open-ended questions.

Structured interview assessing the knowledge and attitudes aims to determine the level of knowledge and question the attitudes on sexuality of individuals with mild or moderate mental disability. Interviews include real-life situations. Understanding of such situations was questioned, as well as the behaviour in such situations, whether the reaction in such situations is appropriate or inappropriate. Respondents were faced with real situations in the form of a question with defined and offered answers. The respondents circled their answer, thus saying yes or no. Lastly, there were two questions, which included a picture and tested concrete knowledge about sexual intercourse and naming of sexual markers.

Method of data processing

Data were processed with the SPSS programme for statistical data processing. Methods of descriptive statistics: average and absolute values were used. To determine statistically significant difference *t*-test was used.

Results and discussion

The collected data showed that the basic sexual identity of the respondents is developed. All respondents except one (95.8%) consider themselves to be adults and were able to correctly identify their sex. One respondent considers himself to be a child, in spite of the fact that he is an adult. All respondents could determine their age (Table 1).

To continue, respondents had to describe their looks, write something about their good and bad characteristics. The greatest number of respondents (66.7%) partially answered theses questions. All respondents could describe their physical appearance.

Most respondents had difficulties with listing their characteristics, especially bad ones. Some respondents answered with "I do not know this question", while some respondents expressed their lack of understanding for the term "personality", which needed additional explanation.

Respondents gave similar answers about parts of body they mostly like (hands and legs), one female respondent said she "likes breast the most." 29.2% of respondents, slightly more than a third, answered this question thoroughly and completely, thus leading us to conclude that they had developed self-consciousness and a positive picture of themselves.

Furthermore, the respondents had to determine the male developmental stages, i.e., put in order a young man, small child, a boy and a grown-up man according to age. More than a half of the respondents (54.2%) completely determined the levels of development of a man, while 45.8% had difficulties in differentiating between development levels. The greatest lack of understanding was between the youth and the grown up (young man and a grown up).

In terms of the female developmental stages (a girl, a young woman, woman and elderly lady), the level of correct answers was slightly higher. 66.7% of respondents correctly answered the question, while 33.3% showed difficulties in answering this question.

Table 1 Variable of knowledge

Variable of knowledge	Category of answer (% and f)					
	0[a]		1[a]			
Sexual identity	%	*f*	%	*f*		
How old are you?	4.2	1	95.8	23		
Are you a child or an adult?	4.2	1	95.8	23		
Knowledge about your own sex	4.2	1	95.8	23		
Variable of knowledge	Category of answer (% and f)					
Self-consiousness	0[a]		1[b]		2[c]	
	%	*f*	%	*f*	%	*f*
Describe your physical appearance	4.2	1	67	16	29.2	7
Which of your characteristics are bad?						
What are you good at? What do you like doing?						
Which parts of your face do you like the most?						
Which parts of your body do you like the most?						
Variable of knowledge	Category of answer (% and f)					
Sexual development	0[a]		1[a]			
	%	*f*	%	*f*		
Development of a man	45.8	11	54.2	13		
Development of a woman	33.3	8	66.7	16		
Variable of knowledge	Category of answer (% and f)					
Sexual markers	0[a]		1[b]			
	%	*f*	%	*f*		
Re there any physical differences between men and women?	/	/	100	24		
Female genitals	12.5	3	87.5	21		
Male genitals	20.8	5	79.2	19		
Variable of knowledge	Category of answer (% and f)					
Sexual behaviour	0[a]		1[b]			
	%	*f*	%	*f*		
What is masturbation?	29.2	7	70.8	17		
Male masturbation	29.2	7	70.8	17		
Female masturbation	33.3	8	66.7	16		
Conception	8.3	2	91.7	22		
Masturbation at public place	29.2	7	70.8	17		
Intimate touching and intimacy of that act	16.7	4	83.3	20		
Sexual intercourse at public places	4.2	1	95.8	23		
Frequent changes of sexual behaviour	12.5	3	87.5	21		
Kissing at public places	58.3	14	41.7	10		
Is all right to masturbate?	50	12	50	12		
Sexual intercourse with the person of the same sex	95.8	23	4.2	1		
Variable of knowledge	Category of answer (% and f)					
Sexual misuse	0[a]		1[b]			
	%	*f*	%	*f*		
Knowing a person and intimate touching	4.2	1	95.8	23		
Liking a person and intimate touching	16.7	4	83.3	20		

Table 1 continued

Variable of knowledge	Category of answer (% and f)			
	0[a]		1[a]	
Intimate touching and friends	16.7	4	83.3	20
Sexual intercourse with a stranger	12.5	3	87.5	21
Sexual intercourse and liking	8.3	2	91.7	22
Sexual intercourse with parents	/	/	100	24
What is rape?	12.5	3	87.5	21
Forms of sexual expression	Category of answer (% and f)			
	No		Yes	
	%	*f*	%	*f*
Experience of sexual intercourse	66.7	16	33.3	8
Do you have a boy/girl friend?	50	12	50	12
Kissing and hugging	37.5	9	62.5	15
Intimate touching	66.7	16	33.3	8
Experience of sexual intercourse	70.8	17	29.2	7
Experience of masturbation	70.8	17	29.2	7
Variable of knowledge	Category of answer (% and f)			
Period	0[a]		1[b]	
	%	*f*	%	*f*
What is period?	4.2	1	95.8	23
Who has period?	/	/	100	24
Age of the beginning of a period	16.7	4	83.3	20
Frequency of a period	20.8	5	79.2	19
Time frame of period	8.3	2	91.7	22
Through which part of woman's body a period bleeds?	29.2	7	70.8	17
Hygienic means during a period	20.8	5	79.2	19
Hygiene of body during a period	12.5	3	87.5	21
Staying in bed during a period	41.7	10	58.3	14
Work during a period	54.2	13	45.8	11
Sexual intercourse during a period	16.7	4	83.3	20
Menopause	37.5	9	62.5	15
Age of menopause	45.8	11	54.2	13
Variable of knowledge	Category of answer (% and f)			
Contracpeption	0[a]		1[b]	
	%	*f*	%	*f*
Contraception as a term	20.8	5	79.2	19
Anti-baby pills	45.8	11	54.2	13
Condoms	12.5	3	87.5	21
Loose	41.7	10	58.3	14
Who takes anti-baby pills	8.3	2	91.7	22
Where can you buy anti-baby pills	8.3	2	91.7	22
Who uses condoms	37.5	9	62.5	15
Where can you buy condoms	41.7	10	58.3	14
Who uses loose	12.5	3	87.5	21

Table 1 continued

Variable of knowledge	Category of answer (% and f)					
	0[a]			1[a]		
Where can you get loose	20.8		5	62.5		15
Variable of knowledge	Category of answer (% and f)					
Pregnancy and birth	0[a]			1[b]		
	%		*f*	%		*f*
Pregnancy	4.2		1	95.8		23
How does conception occur	8.3		2	91.7		22
Where does a baby grow and develop	45.8		11	54.2		13
Period of pregnancy	16.7		4	83.3		20
Where does a baby get out	50		12	50		12
Protection of sexual health	0[d]			1[e]		
Sexually risky behaviour	33.3		8	66.7		16
Sexually transmitted diseases	29.2		7	70.8		17
	0[f]		1[f]		2[f]	
Sexually transmitted diseases	%	f	%	f	%	f
	37.5	9	20.8	5	41.75	10
	0*		1**		2**	
Protection from sexually transmitted diseases	12.5 (3)		54.2 (13)		33.3 (8)	

[a] incorrect answer

[b] partial answer

[c] complete answer

[d] percentage and frequency of incorrect answers

[e] percentage and frequency of correct answers

[f] number of listed sexually transmitted diseases

All respondents said that there are physical differences between men and women. All respondents listed sexual organs as one of the main differences. A bit more than a third of the respondents (29.2%) identified only one difference between a man and a woman (sexual organs). They did not recognize other differences.

Slightly less than half of the respondents (45.8%) fully identified differences in basic sexual markers between men and women. Other respondents answered this question partly. A high percentage of the respondents (87.5%) identified female sexual organs.

12.5% of the respondents marked female sexual organs as male sexual organs.

79.2% of respondents recognized male sexual organs, while 20.8% of the respondents answered this question incorrectly.

Even though some of the respondents answered the question relating to female sexual organs correctly, in the following question those same respondents marked the above-mentioned male sexual organs again as female ones. Similarly, in spite of identifying listed sexual organs (penis and scrotum) as male sexual organs, those same respondents identified clitoris, vagina, womb, and ovaries again as male sexual organs. This shows lack of knowledge and differentiation between male and female sexual organs. Thus, a high percentage of correct answers are not an objective measure of their knowledge.

A high number of respondents (70.8%) knew what the meaning of masturbation is, and 29.2% of the respondents consider masturbation to be equal to sexual intercourse.

In terms of male and female masturbation, 70.8% of the respondents knew what a man does when masturbating, and 66.7% of the respondents (one person less) knew what female masturbation looks like. Those respondents who did not answer this question correctly saw no difference between male and female masturbation and kissing. Almost all respondents answered correctly the question on how a baby is conceived.

In terms of differentiating between appropriate and inappropriate public sexual expression, public masturbation or masturbation at public places is seen as inappropriate sexual behaviour by 70.8% of the respondents.

A high number of respondents (83.8%) believe that intimate touching should take place with the protection of intimacy and privacy of this act.

All respondents apart from one (95.8%) described sexual intercourse at public space as inappropriate sexual behaviour. Frequent change of sexual partners or promiscuous sexual behaviour is seen in a negative light by the majority of the respondents (87.5%). More than half of the respondents described kissing at public places as an inappropriate way to behave. Precisely half of the respondents (50%) think that it is not ok to masturbate, while the same number expressed positive feeling about masturbation. In terms of homosexuality, all respondents except one (95.8%) expressed a negative attitude.

All respondents except one (95.8%) think that for intimate touching of another person it is important to know this person well, and 83.3% believe that they should like that person. Only one respondent (4%) believes that it is not important to know a person whose intimate parts of body one is touching, and a bit higher proportion (16.7%) stated that liking is not important. Hence, three persons said that it is important to know a person whose intimate parts of body one is touching, but it is not necessarily important to like that person. The same percentage of the respondents (83.8%) believes that intimate touching from a friend is not appropriate.

Almost all respondents (91.7%) believe that one should like the person with whom he/she is having sexual intercourse. All respondents (100%) said that it is not all right to have sexual intercourse with their parents. A high percentage of the respondents (95.8%) chose a correct definition of rape, as sexual intercourse without the consent. One respondent saw sexual intercourse and rape as equal. 50% of the respondents said that they have a girl/boy friend. In terms of practice and various forms of sexual expression, non-direct signs of sexual expression towards a partner were listed by 62.5% of the respondents. 33.3% of the respondents have experienced direct touching of intimate parts of a body. Even though half of the respondents have a positive attitude towards masturbation, only 29.2% of the respondents said that they have experienced masturbation or that they satisfy their needs in this manner. In terms of masturbation, the authors believe that it is possible that the respondents did not give a truthful answer based upon their respectful relationship.

Regarding the term "period" 95.8% of the respondents knew how to define it, while one respondent thought of period and illness as equal. All respondents said that women have periods. A high percentage of respondents (83.3%) correctly determined the beginning of the first period. The frequency of period was correctly determined by 79.2% of the respondents, and 20.8% of the respondents did not give a correct answer to this question. Those who did not give a correct answer said that woman bleed every day, while some said that it occurs only once a year. Mostly, these answers were provided by male respondents. Almost all respondents (91.7%) determined correctly the time frame of a period.

Named objects such as pads and tampons were recognized as a hygienic means used during periods by 79.2% of the respondents, and 20.8% of the respondents defined those objects as medication and pills. In terms of personal hygiene of a woman's body during a period, 87.5% of the respondents believe that female sexual organ should be washed more frequently during those days, while 12.5% of the respondents negate such need.

In terms of behaviour during the period, 83.3% of the respondents believe that there should be no sexual intercourse, 54.2% believe that women cannot do ordinary things, 41.7% believe that women should relax or spend a day in bed, which may imply that they equate period with illness. Less than half of the respondents, 45.8%, of the respondents believe that a woman can do ordinary and daily things, and a little bit more than a half (58.3%) believe that spending a day in bed is not necessary. The term and the purpose of contraception are recognized by 79.2% of the respondents. Regarding knowledge about specific types of contraception, slightly more than half of the respondents (54.2%) recognized "anti-baby" birth control pills as a type of contraception. Majority of the respondents (91.7%) said that this type of contraception is used by women. The same percentage knew how and where to get them.

Condoms as a type of contraception were identified by 87.5% of the respondents. The respondents knew less about this type of contraception. 62.5% of the respondents stated that it was used by a man, and 58.3% knew where it can be bought. More than a third (37.5%) of the respondents stated that condoms are used by women, and 41.7% of the respondents did not know where to buy condoms. Loop (intra uterine device) was recognized by 58.3% of the respondents, how it can be used was known to 87.5% of the respondents, and where it can be acquired was informed 62.5% of the respondents. All respondents apart from the one (95.8%) knew how conception occurs. Only a half of the respondents (54.2%) correctly identified parts of women's body in which a baby is developed. A significant number of the respondents (83.3%) correctly determined the period of pregnancy.

Precisely half of the respondents (50%) correctly determined a part of the female's body connected to giving birth. The respondents in high percentage defined what a pregnancy is, how long it lasts and how it happens, but only a half of the respondents know about the parts of body connected with pregnancy and giving birth. Symptoms of pregnancy were correctly identified by only 29.2% of the respondents. The majority of the respondents recognized one symptom, which points to pregnancy, i.e., lack of period.

In terms of sexually dangerous behaviour 66.7% of the respondents correctly defined sexually risky behaviour. More than half of the respondents (70.8%) identified correctly the way of transmission of sexual diseases, while 29.2% of the respondents believe that sexually transmitted diseases are transmitted by hugging, kissing, and hand shaking. The respondents showed a low level of knowledge about naming of sexually transmitted diseases. Respondents were asked to name sexually transmitted diseases they know. 37.5% of the respondents could not name a single disease, 20.8% of the respondents named one, mostly AIDS, and 41.7% of the respondents named two diseases (AIDS, syphilis). Only 33% of the respondents showed a complete knowledge of how to protect against sexually transmitted diseases, 54.2% of the respondents did not have a complete knowledge. 12.5% of the respondents did not state a single way of protection against sexually transmitted diseases and knew nothing about it.

Structured interview assessing knowledge and attitudes—analyses of the results

Table data presentation

Table 2 shows the percentage and frequency of correct and false answers in particular variables of knowledge.

Questions were ranked in the following manner:

Table 2 Analyses of marginal frequencies of variable of knowledge

	Variable of knowledge	Category of answers % (f)			
		0[a]		1[b]	
1.	Alone at home	12.5%	3	87.5%	21
2.	Hitch- hiking	4.2%	1	95.8%	23
3.	Intimacy	/	/	100%	24
4.	Intimacy with a relative	4.2%	1	95.8%	23
5.	Male masturbation	STAV			
6.	Female masturbation				
7.	Masturbation at work	4.2%	1	95.8%	23
8.	Homosexuality	83.3%	20	16.7%	4
9.	Lesbians	79.2%	19	20.8%	5
10.	Unwanted physical contact				
10a.	Say to stop	8.3%	2	91.7%	22
10b.	Hit them	20.8%	5	79.2%	19
10c.	Swear	16.7%	4	83.3%	20
11.	Lost money				
11a.	Ask the money from a stranger	23.8%	5	76.2%	16
11b.	Look for a phone	12.5%	3	87.5%	21
11c.	Ask for help	29.2%	7	70.8%	17
12.	Meetings				
12a.	Going out	47.8%	11	52.2%	12
12b.	Introduce yourself	8.3%	2	91.7%	22
13.	Unpleasant phone call				
13a.	Hang up	8.3%	2	91.7%	22
13b.	Talk to a person	8.3%	2	91.7%	22
14.	Superior person				
14a.	Kiss him	37.5%	9	62.5%	15
14b.	Say no	25%	6	75%	18
14c.	Talk to somebody	9.1%	2	90.9%	20
15.	Pregnancy prevention				
15a.	Using contraception	12.5%	3	87.5%	21
15b.	Cannot get preganant from one sexual intercourse	25%	6	75%	18
16.	Reason for pregnancy				
16a.	Sexual intercourse without protection	4.2%	1	95.8%	23
16b.	Eating water melon	54.2%	13	45.8%	11
16c.	Kissing	29.2%	7	70.8%	17
17.	Misuse by a bus driver				
17a.	Touching sexual organs	41.7%	10	58.3%	14
17b.	Combing hair	45.8%	11	54.2%	13
17c.	Say no and leave the bus	4.2%	1	95.8%	23
18.	Identification of sexual intercourse	4.2%	1	95.8%	23
19. Identification of sexual markers[c]					
	Women's character	Male character			
%	*F*	Number of obtained points	%	*f*	

Table 2 continued

Variable of knowledge		Category of answers % (f)		
		0[a]		1[b]
/	/	1	/	/
/	/	2	4.2	1
8.3	2	3	4.2	1
8.3	2	4	20.8	5
29.2	7	5	25	6
54.2	13	6	45.8	11

[a] frequency and percentage of incorrect answers

[b] frequency and percentage of correct answers

[c] exemption in numbering. Maximal number of point is 6

False answer = 0 point.
Correct answer = 1 point

Collected data show that the majority of the respondents 87.5% identified or recognized appropriate way of reacting in a situation when they are alone at home and someone unknown arrives. The majority answered that they should not open a door for an unknown person, and they recognized this situation as potentially dangerous. Three respondents (12.5%) did not recognize the danger of such a situation. A high percentage (95.8%) of the respondents identified a blood relative as an inappropriate choice of a partner for sexual behaviour.

Respondents were asked whether it was all right to masturbate in complete privacy, such as their rooms. In terms of masturbation, respondents are divided. Half of the respondents (50%) have a positive attitude towards this type of sexual expression, while the other half of the respondents expressed a negative attitude. In terms of masturbation at public places, or more specifically at workplace, almost all respondents (95.8%) stated that such way of public sexual expression is inappropriate.

This interview questions their attitudes toward female and male homosexuality as well. 83.3% of the respondents have a negative attitude towards male homosexuality, and 79.2% of the respondents have a negative attitude towards female homosexuality. 16.7% of the respondents have a positive attitude towards male homosexuality, and 20.8% of the respondents have a positive attitude towards female homosexuality.

In a situation of unwanted physical contact, 91.7% of the respondents stated that the adequate way to respond is to voice their disagreement. Other ways were offered to them for a response, 20.8% agreed with the possibility of using physical force such as a slap, while 16.7% identified verbal aggression.

In a possibility of losing money at a public place, respondents chose in high numbers appropriate ways to react. 87.5% of the respondents would call home, 70.85% of the respondents would ask the help of an official person and 76.2% of the respondents believe that it is not appropriate to ask for the money from an unknown person in their surroundings.

When getting to know an unknown person of the opposite sex, 91.7% of the respondents opted for a simple and common way of introduction, but 41.7% of the respondents stated that the appropriate way of reaction in such a situation includes asking the person out. This

means that some respondents answered yes to both questions. In case they received an unpleasant phone call, almost all respondents (91.7%) said they would hang up.

In terms of physical contact initiated by their superiors, 62.5% of the respondents did not approve of such behaviour and would reject such contact. 37.5% of the respondents said that they would kiss their boss if he/she asked them. 3/4 (75%) of the respondents stated that verbal rejection would be a possible way of reaction, and a high percentage (90.9%) of the respondents said that they would talk to somebody if something similar happened. One can conclude that a high number of respondents recognized appropriate manner of reaction in this particular situation.

A high percentage of respondents (87.5%) stated that the use of contraception is necessary if they want to have sexual intercourse while decreasing the risk of becoming pregnant. 25% of the respondents believe that a child cannot be conceived if they have only one sexual intercourse event, while 75% of the respondents rejected such a statement.

Almost all respondents (95.8%) identified pregnancy as a result of lack of contraception use, but the majority of the respondents (54.2%) believe that pregnancy can result from eating a watermelon, and 29.2% of the respondents believe that kissing can result in pregnancy. Even though the majority of the respondents listed sexual intercourse as a reason of pregnancy, due to other given answers the respondents showed insufficient knowledge about pregnancy.

Similarly, respondents showed a lack of understanding of sexual misuse by bus drivers, and they gave contradictory answers. Almost all respondents (95.8%) said that in such a situation they would reject touching of sexual organs of a stranger. However, in case that an unknown person asks the same group of respondents to touch his/her sexual organs, such as a bus driver 41.7% of the respondents said that they would, while 58.3% of the respondents said that they would not. This means that some respondents answered these questions in a contradictory manner. Such results highlight an incomplete appreciation for the gravity of the situation, and almost 45.8% of the respondents said that they are not aware of danger and seriousness of this situation.

In terms of identifying sexual intercourse, respondents were shown a picture, a visual presentation of a couple having sexual intercourse and the respondents needed to identify what this couple was doing. Almost all respondents (95.8%) recognized that they were engaged in sexual intercourse, while one respondent though it was an example of wrestling. Respondents mostly identified parts of female and male character. This question was enriched with a picture. All respondents recognized the first character as a man, and second character as a woman, but they faced difficulties in recognizing of particular parts of female and male body. Only 54.2% of the respondents fully recognized parts of the women's body. Lower percentage of the respondents (45.8%) fully identified parts of male body. Respondents who partly answered this question, mostly showed difficulties in recognizing men's ties, and the lack of knowledge of that part at least under such name. Respondents also had difficulties in distinguishing parts of the male sexual organ.

t-Test

To determine if there is a difference in the results between two various group of respondents in relation to particular criteria, t-test was used. Differences were explored specific to respondents' sex, level of disability, educational neglect, and in relation to the practical experience of sexual behaviour (experience or inexperience of sexual intercourse, and relating to having or not having a partner, and the attitude towards masturbation).

Significance of difference among the respondents in relation to their age

There were 14 male and 10 female respondents. By applying the criteria of the respondents' sex, the significant difference in the results appeared in two variables: understanding relations, pregnancy and birth. Male respondents showed better understanding of relations, better and fuller understanding of real situations, mostly they gave correct answers, and identified more appropriate ways of behaviour compared to female respondents ($t = -2.747$; $p < 0.05$ which means that a significant difference in the obtained results, considering the sex, in this variable is significant at the level of 5%). Female respondents showed better understanding of pregnancy and birth ($t = 2.505$, $p < 0.05$, which means that the difference is at the level of 5%). It was noticed that male population with mental disabilities functions much better socially, even in cases of the same level of disability, male respondents showed higher degree of interest, and were more open and interested in this research. Some female respondents at the beginning reacted with unease when they were informed that this questionnaire was about sexuality. Some female respondents, in spite of taking part in the research, quit half way to the end of the questionnaire, which they explained by identifying the questionnaire as a vulgar one. Significant differences were not present in other variables in relation to sex (Table 3).

Significance of difference among the respondents in relation to their level of mental disability

Research was conducted with twenty-four persons with mental disabilities. 18 respondents were person with mild disabilities, and 6 respondents were person with medium disabilities. Significant difference in the results, by applying the criteria of the level of mental disability, appeared in several variables: consciousness about sexuality, menstruation and the protection of sexual health (Table 4).

t-test showed that person with milder level of mental disabilities have a more developed consciousness about sexuality compared to persons with medium level of mental disability ($t = 2.477$; $p < 0.05$, which means that a significant difference in the obtained results, considering this variable, is significant at the level of 5%). Moreover, they showed better knowledge about menstration and behaviour, or in other words hygiene of the body during a period ($t = 2.352$, $p < 0.05$, as in a previous variable, the difference is at the level of 5%). They have better complete knowledge about the protection of sexual health, or about risky

Table 3 Difference among the respondents in relation to their age

Variable of knowledge	Values of t-test	*p*
Understanding relations	−2.747	$P < 0.05$
Pregnancy and birth	2.505	$P < 0.05$

Table 4 Difference among the respondents in relation to their level of mental disability

Variable of knowledge	Values of *t*-test	*p*
Consciousness about sexuality	2,477	$p < 0.05$
Menstruation	2,352	$p < 0.05$
Protection of sexual health	4,958	$p < 0.01$

sexual behaviour and sexually transmitted diseases ($t = 4.958$; $p < 0.01$, which means that the difference is at the level of 1%).

Significance of difference among the respondents in relation to the experience of sexual intercourse

Research looked at the weight of practical experience and if it affects knowledge about sexuality. Out of 24 respondents, 8 of them reported having sexual intercourse, while 16 of them had no experience of sexual intercourse. There are three differences in relation to this variable: social interaction, sexual behaviour and sexual markers. Persons with the experience of sexual intercourse have better results in the variable of social interaction ($t = -2.765$; $p < 0.05$, obtained difference is significant at the level of 5%). It was shown that respondents who do not have the experience of sexual intercourse identified the basic sexual differences between men and women more precisely and correctly ($t = 3.277$, $p < 0.01$). A significant difference between these two groups was achieved in the variable of sexual behaviour ($t = -3.035$; $p < 0.01$) (Table 5).

Conclusion

In conclusion, there is limited research in the area of sexuality of persons with mental disability. This research conducted on a small occasional sample is an attempt to contribute to this topic and to stimulate further rigorous research.

Similar to findings in United States studies [19], results from the current study highlight that participants showed insufficient but still a certain level of knowledge about sexuality. Respondents generally differentiated between male and female sex, but they showed inadequate level of knowledge in terms of basic sexual differences. Relatively low level of knowledge of the respondents was shown in the area of sexual diseases and the ways to protect against them, in the area of contraception, pregnancy, and in the area of appropriate ways to react in situations of sexual misuse. The majority of the respondents conveyed certain knowledge about menstruation, and from my own experience of working with the respondents, I can say that they displayed a high level of independence in hygiene.

Although this is very often the only way of satisfaction for their expressed sexual needs, half of the respondents have a negative attitude towards masturbation, believing that it is something bad and something that should not be allowed. Only one third of the respondents have the experience of masturbation. According to Buckley and Sacks [14] sexual needs are mostly satisfied via masturbation, and it is two times more present among male respondents. In our research there is a possibility of incomplete sincerity of the respondents. The research showed that the respondents have little sexual experience. Only one third of respondents have sexual experience, and this was approximately one or two

Table 5 Difference among the respondents in relation to the experience of sexual intercourse

Variable of knowledge	Values of *t*-test	*p*
Social interaction	−2.765	$p < 0.05$
Sexual markers	−3.277	$p < 0.01$
Sexual behaviour	−3.035	$p < 0.01$

intercourse events, and not a regular sexual life. The results are identical to the research of Haracopos and Pedersen [20].

Furthermore, in terms of male and female friendships, holding hands and hugging are very often seen. Even though such outward displays of affection are frequently discouraged by parents. The majority of parents with mentally disabled children do not fully address and/or accept their need for sexuality. They limit their contacts and the possibilities of sexual expression due to the fear of misuse and unwanted pregnancy. Some parents completely ignore the fact that their children have sexual needs and feelings.

Within the context of the inquiry, 83.3% of the respondents have a negative attitude towards male homosexuality, and 79.2% of the respondents have a negative attitude towards female homosexuality. 16.7% of the respondents have a positive attitude towards male homosexuality, and 20.8% of the respondents have a positive attitude towards female homosexuality.

Respondents have difficulties in understanding of particular professional terms related to sexuality. The research showed that in relation to the sex of the respondents, there were no significant differences in the level of knowledge among the respondents.

The results of this research point to the need of more engagement of sexual education of mentally disabled persons. It is necessary to increase their level of knowledge through various associations and projects. Similarly, there is a need for higher number of counselling where the youth with mental disabilities can express their problems and dilemmas concerning sexuality. The research is also a non-direct support to parents to remember sexuality in their individual experience in raising/rearing of children with mental disabilities. It is important for social workers and other professionals to educate parents about an approach to their children and ways of reacting in certain situations. It is important to provide support for parents and persons with mental disabilities via various counselling, associations and self-help avenues so that they could appropriately deal with the sexuality of their children.

More attention should be given to this issue, both in scientific circles and in society, media and ordinary citizens to make the problems of persons with mental disability and their parents more visible.

This research provides some basic markers of sexuality of persons with mild and medium mental disability. Many dilemmas and needs remain unresolved. Thus, further research is needed.

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