

The image of sexual expression of female patients suffering from mood disorders: the questionnaire study on Polish clinical sample

Robert Kowalczyk, Tomasz Krystyan, Marek Krzystanek, Katarzyna Piekarska – Bugiel, Katarzyna Waszyńska, Artur Daren, Jacek Kurpisz, Krzysztof Nowosielski, Zbigniew Lew-Starowicz, Weronika Klon

Abstract

Aim: Mood disorders are significantly connected with sexual functioning impairment among women. The aim of this study was to assess and describe specifics of sexual expression and its dysfunction in groups of women diagnosed with bipolar disorders (F31), major depressive disorder (F32 and F33) and persistent mood disorders (F34).

Material and Methods: The sample comprised 129 female patients aged 19-65. Subjects were recruited in the Polish psychiatry hospital wards. Patients were interviewed using the sexological questionnaire Mell-Krat (Kromierzyńska's version) for women (SFK/K) for clinical assessment of patients' mood Montgomery-Åsberg Depression Rating Scale (MADRS), and Young Mania Rating Scale (YMRS) were used. Alcohol Use Disorder Identification Test (AUDIT) was also used to control alcohol addiction's influence on sexual functions.

Results: The mean final score in SFK/K for the whole sample was 35.3 points (SD=15.65), clearly below the cut-off point for the average level of sexual reaction for the Polish population. More than 88.4% of patients achieved scores lower than optimal.

Discussion: The prevalence of sexual dysfunctions among women suffering from mood disorders is increased. However, the image of the sexual expression of those patients is not homogenous.

Conclusion: The paper put light on the sexual functioning of women with mood disorders. However, further research using more specific methods and bigger samples is needed.

mood disorder, woman, sexual functioning

Robert Kowalczyk¹, Tomasz Krystyan¹, Marek Krzystanek², Katarzyna Piekarska – Bugiel², Katarzyna Waszyńska³, Artur Daren¹, Jacek Kurpisz⁴, Krzysztof Nowosielski⁵, Zbigniew Lew-Starowicz⁶, Weronika Klon⁷: ¹Faculty of Psychology, Pedagogy and Humanities, Andrzej Frycz Modrzewski Kracow University, Kraków, Poland; ²Department of Psychiatry and Psychotherapy at Medical University of Silesia, Katowice, Poland; ³Department of Health Promotion and Psychotherapy at the Faculty of Educational Studies Adam Mickiewicz University, Poznań, Poland; ⁴Department and Clinic of Psychiatry, Pomeranian Medical University, Szczecin, Poland; ⁵Department of Gynecology, Obstetrics and Gynecological Oncology, University Clinical Center, Chair of Gynecology and Obstetrics, Medical University of Silesia, Katowice, Poland; ⁶Department of Medical Sexology and Psychotherapy Medical Center for Postgraduate Education, Warsaw, Poland.

Correspondence address: wk12821@amu.edu.pl

INTRODUCTION

The term 'sexuality' was defined by WHO [1] as a central aspect of personality structure, which contains a wide range of psychological and physiological processes associated with the individual and social dimensions of sexual behaviours. This includes sex, gender identities and roles, sexual orientation, eroticism, pleasure, intimacy and reproduction. Generally, sexuality is an effect of interaction between biological, psychological, social and other factors. It is experienced and expressed in thoughts, fantasies, desires, beliefs, attitudes, values, behaviours, practices, roles and relationships.

This article concerns a part of sexuality: functional and dysfunctional sexual expression. This fact demands relating it to a theoretical model of sexual response. There are several approaches which describe female sexual response that are presented in the literature – for example, linear, circular and non-linear [2–7]. The most composite one is the non-linear concept of Basson, which highlights lower dependence of sexual response from the physiological stimulus in women, compared to men [8,9]. According to this author, a much more critical role in the ability to gain sexual response and pleasure play the moment of the ovulation cycle, past sexual experience, attitudes toward sex and current psychological predisposition [10].

The most common dysfunctions which may occur during the particular phases of the sexual response cycle are hypoactive sexual desire (and much less frequently sexual aversion) [11], arousal disorders, orgasmic disorder (anorgasmia), dyspareunia and vaginismus [11–13].

There are numerous reasons which result in impairment of sexual response. In the context of this study, important are the psychiatric ones (i.e. mental illnesses and medications used in their therapies) and psychological (emotional states related to mental disorders and partner difficulties) [11]. Sexual dysfunctions are mainly connected with these mental illnesses and disorders, which concern the affective sphere because

of its co-responsibility for the vegetative system control. When mental problems are manifested by depressed mood and related symptoms, the risk of various sexual dysfunction is very high. Then the sexual problems deteriorate the individual overall functioning [13, 14]. For example, they come with sleep disorders, anorexia, loss of libido or worsened general psychomotor [13].

Sexual dysfunctions are also a common side effect of antidepressants, particularly SSRIs and SNRIs. One of the main mechanisms of such sexual function impairment is agonistic effects on serotonin 5-HT₂ and 5-HT₃ receptors [14], which results in sexual desire reduction and orgasm impede [15].

Participants and Procedure

The study was undertaken on female patients with diagnosed mood disorders (F31, F32, F33 and F34). Participants were recruited by the Department of Psychiatry and Psychotherapy at the Medical University of Silesia, Katowice, Poland; the Department and Clinic of Psychiatry, Pomeranian Medical University, Szczecin, Poland; the Department of Medical Sexology and Psychotherapy Medical Center for Postgraduate Education, Warsaw, Poland. After consent was given, patients were asked to fill in standardised questionnaires and be interviewed; for mood disorder assessment Montgomery–Åsberg Depression Rating Scale (MADRS) [16] and Young Mania Rating Scale (YMRS) [17] were used. Such a procedure was executed to exclude the impact of any distortions of depressive or maniac symptoms on self-description during the further interview based on the sexological questionnaire Mell-Krat SFK/K [18]. Health and socio-demographic data were taken from the illness history files.

Patients who did not meet the age (18–65) criteria or suitable diagnosis of mood disorder were excluded from the sample and respondents who didn't answer the questions on the SFK/K questionnaire. Finally, the sample comprised 129 women aged 19–65 ($M=43.43$; $SD=10.52$). The demographic description of the studied group is presented in Table 1.

Table 1. The demographic description of the studied group.

| Nosological diagnosis according to ICD-10 | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|----------------|--|--------------------|--|---------------------|--|----------------------|--|-----------------|--|----|--|-------|--|----|--|-------|--|----|--|-------|--|
| F31 ChADI + ChAD II | | F32 | | F33 | | F34 | | | | | | | | | | | | | | | | | |
| 36 | | 27.9% | | 13 | | 10.1% | | 76 | | 58.9% | | 4 | | 3.1% | | | | | | | | | |
| Age | | | | | | | | | | | | | | | | | | | | | | | |
| <20 years | | 20 – 29 years | | 30 – 39 years | | 40 – 49 years | | 50 – 59 years | | 60 – 65 years | | | | | | | | | | | | | |
| 1 | | 0.8% | | 16 | | 12.4% | | 25 | | 19.4% | | 44 | | 34.5% | | 38 | | 29.5% | | 5 | | 3.9% | |
| Place of living | | | | | | | | | | | | | | | | | | | | | | | |
| Village | | <20k residents | | 20 – 50k residents | | 50 – 100k residents | | 100 – 500k residents | | >500k residents | | | | | | | | | | | | | |
| 21 | | 16.3% | | 4 | | 3.1% | | 14 | | 10.9% | | 6 | | 4.7% | | 10 | | 7.8% | | 74 | | 57.4% | |
| Education | | | | | | | | | | | | | | | | | | | | | | | |
| Primary | | Vocational | | Secondary | | Higher | | | | | | | | | | | | | | | | | |
| 6 | | 4.7% | | 14 | | 10.9% | | 66 | | 51.2% | | 43 | | 33.3% | | | | | | | | | |
| Affective disorder duration | | | | | | | | | | | | | | | | | | | | | | | |
| 0 – 5 years | | 6 – 10 years | | 11 – 15 years | | 16 – 20 years | | | | | | | | | | | | | | | | | |
| 57 | | 44.2% | | 23 | | 17.8% | | 23 | | 17.8% | | 16 | | 12.4% | | | | | | | | | |

The studied women's age ranged from 19 to 65 years, with a mean of 44 years ($SD=10.52$). The majority of the sample (63.6%) were in the mid-adulthood phase or just before the threshold of the late adulthood phase (40-59 years). Most of them were city inhabitants – especially the large ones with a population over 500,000 (57.4%), with secondary education (51.2%) or higher (33.3%). The most common income source was pension (35.7%) and full-time work (29.5%). Respondents mainly were patients with a clinical diagnosis of major depressive disorder (58.9%), less likely bipolar disorder (type I – 16.3% and type II – 11.6%; total – 27.9%).

The Faculty of Medical Sciences in the Katowice ethics committee from the Medical University of Silesia, Katowice, approved this study. Statistical analysis of the findings was executed with programme Statistica©, 10th version (2011).

RESULTS

On the day of the interview executed for this study, the patients' scores were low and very low on MADRS and YMRS. Regardless of the number of identified previous depressive episodes and the hitherto length of the mood dis-

order (of any type: F31, F32, F33 and F34), a total absence of depressive symptoms was indicated. It has also been shown that over the last 48 hours, among all studied patients with bipolar disorder type I and type II (F31) and cyclothymic disorder (F34), there was a remission of manic or hypomanic symptoms.

The results obtained in the AUDIT questionnaire revealed that one participant presented symptoms, which indicated addiction, another showed symptoms of 'harmful drinking' according to the criteria of addiction ICD-10 and five respondents (3.88%) were marked to model 'risky drinking'. The scores of the remaining 94.6% of the respondents were in the norm, defined as 'no risk' in terms of quantity and frequency of alcohol consumption. The analysed group was thus relatively homogeneous in this regard.

The mean duration of the illness for patients diagnosed with recurrent major depressive disorders F33 ($n=76$) was 9.13 years ($SD=7.04$) on the examination day. These patients experienced an average of 4.49 ($SD=3.62$) depressive episodes and were previously hospitalised an average of 2.01 ($SD=3.07$) times in their lifetimes. Most of this subgroup (75%) didn't show a tendency for drug resistance (in the case of one patient, there was no data in the history file).

In the group diagnosed with bipolar disorder type I and type II F31 ($n = 36$), the duration of ill-

ness lasted longer ($M=13.22$; $SD=9.87$) at the date of testing, in comparison to patients diagnosed with F33. They also experienced more depressive episodes ($M=7.83$; $SD=5.93$) than F33 patients. The average number of manic or hypomanic episodes was 4.08 ($SD=3.65$). Women with bipolar disorders were also more often hospitalised than F33 patients (4.47; $SD=5.01$). The proportion of subjects who did not have a history of resistance to psychopharmacological treatment was predominant (72.2%), which is very similar to the F33 subgroup. There weren't observed any statistically significant differences between patients with type I and type II bipolar disorder in the U Mann-Whitney test (but there were few cases in these groups).

During the hospitalisation in the Polish psychiatric wards studied patients were usually treated with antidepressants from the SSRI group (i.e. Sertraline, citalopram, paroxetine, and escitalopram – in total: 41.1% of all respondents), from the group of SNRI (venlafaxine – 19.4%, and mirtazapine – 12.4%), first-generation antipsychotics (including perazine and chlorprothixene – in total 30.2%), antiepileptic and normothymic drugs (i.e. valproate, carbamazepine, lithium or lamotrigine – in total: 40.3%). These medications, especially SSRIs and SSNRIs, could potentially induce eventual sexual dysfunctions and disorders among respondents [19]. This, in turn, could influence their image of sexuality, which could be reflected in the answers to the SFK/K questionnaire.

The average final score for the entire examined group ($n = 129$) obtained in the SFK/K questionnaire was 35.73 points ($SD=15.65$). The totality of scores ranged from 1 to 67 points, with a maximum of 80 possible points. This means that with a cut-off point set of 55 established as a determinant of optimal sexual functioning and response for Polish women, the scores of the studied patients were lower than in the general population. Only 15 patients (11.6% of the sample) gained equal or higher scores than 55 points (in this subgroup $M=60.53$; $SD=3.96$), while the remaining 88.4% of patients achieved lower scores than the established optimum (in this subgroup $M=32.46$; $SD=13.53$). This observation proved the high prevalence of sexual dysfunctions and disorders in the studied sample.

In the question concerning the desire for sexual contact, more than one-third of respondents

(36.4%) declared that they 'sometimes think about sexual contact'. The same patients' number stated that sexual contacts are important to them. 34.9% of studied women situated the need for sexual contact at the level of 'a few times a month – but not more often than once a week' and 31.8% 'several times a year – but not more often than once a month'. The most commonly chosen answers related to the frequency of sexual intercourse were 'several times a year' (36.4%) or 'several times a month' (33.3%). The studied women most commonly gained 'complete sexual satisfaction during the full sexual intercourses in about 25% of cases' (37.2%), less frequently 'more often' or 'not at all'.

A standard course of intense sexual arousal and vaginal lubrication as a preparatory reaction to intercourse was typical for 41% of women, while weaker and more short-term responses indicated 33.3% of patients. However, findings did not reveal any dominant tendency related to the feelings accompanying sexual intercourse. Such feelings were manifested in very different ways: from 'cold with a low sensitivity' (26.4%), the 'feeling the pleasure of continuing, but still at the same level' (27.1%), and the 'pleasure had been increasing to a certain point, after which it could be dispersed' (22.5%), to the 'culmination of pleasure with the orgasm' (16.2%).

Among the respondents, various emotional responses and attitudes before initiating sexual contact were observed. 44.2% of the studied women 'sometimes had mood and desire for sex, but did not show initiative for this', and 29.5% 'mostly enjoyed the perspective of the incoming sexual contact'. The mood after sexual intercourse was described as: 'indifferent, but without the negative symptoms' (30.2%), 'pretty good, but with a feeling of dissatisfaction' (24.8%) or 'good, accompanied with a pleasant fatigue' (31.8%). The self-evaluation in the role of a sexual partner predominated a feeling that 'everything is fine' (37.2%) or that respondents 'were not really sure if everything is fine' (33.3%). The suspicions of being in a bad sexual condition or certainty of suffering from any sexual dysfunctions were rarely indicated in the studies group.

As for the sexual activities and positions during sexual intercourse, studied women declared that the couple used few simple, basic positions and changed them during coitus (33.3% of re-

spondents, including 29.5% of situations, when it was women's initiative) or agreed to experiment – to a similar extent reluctantly (25.6%, including 21.7% of cases with women's 'exceptional agreement') or willingly (22.5%, containing 24% of 'happily' reacting respondents) – with the female domination position 'on the partner'. Complete initiative or entire submissiveness in sexual activity was rarely stated.

Regarding the total number of achieved orgasms, regardless of the way of reaching climax, 41% of subjects experienced such ecstasy 'a few times a year' and 26% 'a few times a month'. It was much less likely for respondents to have orgasms more often. Climaxes were achieved during sexual intercourse that occurred 'in a minority of cases' (36.4%) or 'mostly' (33.3%). The time needed to achieve orgasm was usually set at 'higher than 15 minutes' (for 36.4% of patients) or 'ranged from 6 to 15 min' (for 27.1% of patients). In most cases, orgasm was achieved besides vaginal coitus – by direct genital caressing (38%). As a typical behaviour during orgasm, studied women frequently reported an increased breathing rate and sighs (30.2%), loud sighs connected with contractions of the body (22.5%) or only increased breathing rate (18.6%). The typical bodily reactions associated with orgasm were weak body sensations after climax (32.6%) or clear, repetitive muscle contractions and feelings of 'pulsing' (28.7%). 23.3% of the respondents were not sure if they experienced any reactions during orgasm at all. The prevalence of bodily reactions experienced during climax comprised: 'about 25% of all orgasms' (33.3% respondents), 'about 50% of orgasms' (20.2%), 'about 75% of orgasms' (17.1%) or 'never' (19.4%). About 45% of the sample did not experience night orgasms and erotic dreams, although, for some women, they took place several times a year (25.6%) or at least once a year (22.5%).

The general self-evaluation of sexual life showed a small domination of women, who find themselves indifferent toward sex, emotionally cold and having problems with gaining sexual arousal (32.6%). The rest of the studied group, besides declared lack of any distortions in the readiness and wish to have sexual contact, felt sexually insatiate (25.4%), or found sexual satisfaction in intimate relationships, eas-

ily got sexual arousal and satisfaction from sexual life (20.2%).

The answers given to the additional items, which were not included in the final score, revealed that the most sexually arousing behaviours during erotic foreplay were: kisses, hugs, caressing of the shoulders, back and legs (for 32,6% of the patients); caressing and breasts kissing (for 22.5%); gentle caressing of the external sex organs (for 24%) and direct stimulation of the clitoris (for 24.8%). As the most satisfying practices during sexual intercourse were indicated: stimulation on the body surface, especially the clitoris (for 48.1%) and shallow intra-vaginal penile movements (for 32.6%). The most disturbing for gaining sexual fulfilment were: lack of spiritual relation with a partner (for 24%) and his superfluous haste, which hindered a longer love game before intercourse (for 20.9%). According to the respondents, the love game lasted from 2 to 5 minutes (based on the answers of those who wanted to give precise timing). The most commonly used methods to prevent unwanted pregnancy were: condoms (29.5%) and coitus interruptus (rejected sexual intercourse – 27.1%). However, these observations do not coincide with the women's preferences for pregnancy prevention (Figure 1).

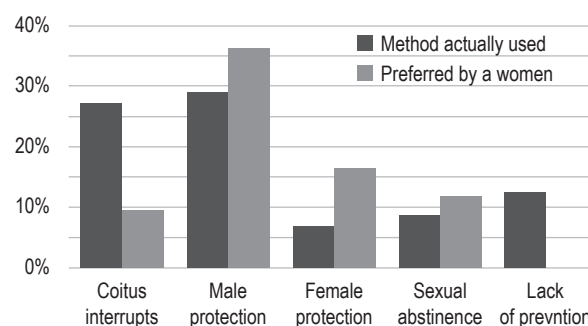


Figure 1. Used and preferred methods of contraception.

Among the difficulties which manifested during sexual intercourse, the surveyed women complained about psychological discomfort due to lack of orgasm (29.5%) and feelings of indifference toward sexual contact (16.3%). 23.3% of the respondents did not report any sexual difficulties in their sexual life.

There was no statistically significant difference in the final SFK/K score between F31 and F33

groups ($p=0.33$). However, SFK/K item 17 concerning bodily reactions after orgasm differentiated both groups in the Mann-Whitney test ($p=0.044$). Patients suffering from F33 tended to choose highly-scored answers more commonly. Such answers reflected stronger feelings and more frequent muscle constrictions during orgasm. Reports concerning affective aspects of desire and sexual arousal, wish to engage in sexual contacts, and preparatory reaction (excitability) did not differentiate both groups. Patients from the F31 group were disposed to slightly more often choose positive answers for a question about their mood before sexual intercourse (i.e. 'I am happy when sexual intercourse is going to happen and I can initiate it'; 36.1% in the F31 vs 25% in the F33) and less common negative ones (i.e. 'I feel indifferent, I never care much about sexual intercourse; 11.1% in the F31 vs 21.1% in the F33). Similarly, in the question about mood after sexual intercourse, women from the F31 group less frequently were choosing low scored answer 'I feel indifferent but without any negative symptoms' (25% in the F31 vs 34.2% in the F33) while more often highly scored one 'I feel good, appeased, pleasantly tired' (50% in the F31 vs 23.7% in the F33). In both mentioned items, the medium-scored answers were chosen similarly frequently by patients from the F31 and the F33 groups. A comparable tendency was observed while analysing the answers given as a reply to a question about self-evaluation as a sexual partner. Studied women from the F31 group a bit more often were reporting that 'everything is all right' (41.7% in the F31 vs 36.2% in the F33), while respondents from the F33 group were more commonly choosing that 'I am cold and not very efficient' (26.3% in the F33 vs 16.7% in the F31), 'I am not sure if everything is all right' (32.9% in the F33 vs 27.8% in the F31). Finally, patients from the F33 group less often reported bodily reactions after orgasm than those from the F31 group ('I am not sure if I experience them'; 27.6% in the F33 vs 13.9% in the F31), as well 'clear, repetitive muscle contractions' (25% in the F33 vs 38.9% in the F31).

Psychological factors, such as 'lack of spiritual relation with a partner', and 'superfluous haste, which hindered a longer love game before the intercourse' had more disruptive effects on gain-

ing sexual fulfilment for patients with bipolar disorders than those with depressive disorders. These answers dominated over answers related to the time of sexual intercourse and pain experienced during sexual contact (Figure 2).

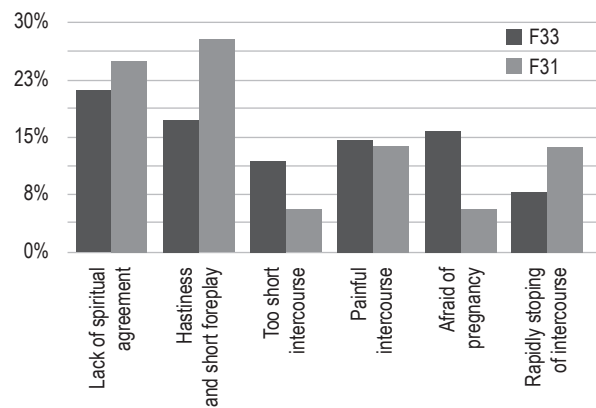


Figure 2. List of situations that make treatment difficult in a patient diagnosed with F33 and F31 according to ICD-10.

DISCUSSION

The gathered data revealed a wide range of general sexual dysfunction prevalence among patients. Despite the lack of clear premises about diagnosis, such as dyspareunia, vaginismus or sexual aversion, most of the answers given by respondents indicated the existence of at least desire and arousal disorders with some difficulties with achieving orgasm. The striking is that about 90% of the sample gained a final score in the SFK/K questionnaire below the optimal functioning level. On the other hand, it is quite surprising that so many of the studied patients do not perceive decreased sexual functions as a problem or do not indicate them directly at all. Probably women under psychiatric care because of mood disorders focus more on other aspects of their sexual expression. Such observation is consistent with Basson's description of factors relevant to female sexual response. The findings also support Basson's opinion about female orgasm, that women do not need to gain erotic satisfaction from intercourse. Hypothetically studied patients pay more attention to the relationship side of sex rather than genital response. The diagnosis of mood disorder

der, which in the case of the analysed sample was mainly a recurrent problem of manic and depressive episodes, had to affect the partnership relation organisation and sexual life as well. Such a solution, which diminishes the meaning of poorer sexual functioning, could be interpreted as a coping mechanism for a psychiatric illness in an intimate relationship. To some extent, it may also reflect the low level of awareness about normal sexual functioning for women (poor sexual education or gender stereotype bias thinking that sexual satisfaction belongs more to men).

Women in the studied sample were set up passively in sexual relationships with their partners. A tendency to choose questionnaire answers manifesting a low tendency to initiate sexual contacts, sexual position selection and minor will to experiment with alternative sexual positions (especially those in which women play a dominant role) was observed. This may reflect shyness or, to some extent, emotional inhibition of the women suffering from mood disorders. Interestingly, this tendency was indicated despite the declared willingness to engage in sexual contact.

Quite striking was identified the tendency of the studied patients to accept coitus interruptus as a contraception method, while it was indicated as the least preferred solution. Subjectively the most preferred hormonal methods for women and condoms were sparsely used in practice. The latter analysis showed a considerable discrepancy between preferred and actually used methods (Figure 1). Especially it concerned coitus interruptus. During the highest fertility days, women would choose sexual abstinence (although generally, it was not the preferred solution). Such a situation is related to the risk of unwanted pregnancy. Such circumstances may be explained in several ways. Firstly, as being persuaded by the sexual partner. Secondly, there may be a situation in which both partners lack knowledge about safer and more women-friendly contraceptive strategies. Thirdly, this may be a reflection of bias coming from the conservative influence of the Catholic Church in Poland, which moral guidelines are against contraception methods – especially those that affect the female's body (i.e. hormonal methods or those used

after having unprotected sex, interpreted by the Polish Episcopate as equal to the abortion procedure [20]). Last, the reason could be the lack of proper sexual education programs in Poland. Even if such classes occur, they are scheduled in insufficient time and often are taught by the Church representatives (priests, nuns, and members of Christian organisations) instead of qualified psychological and sexological staff. Such a solution increases the risk of spreading information based on catholic ideology but not EBM facts [21].

The conflict between preferred and used in-practice contraception methods hypothetically causes a negative emotional response, possibly negatively affecting sexual performance. The result could be psychological comfort reduction and the inability to stay relaxed during sexual contact. Also, an anxiety reaction associated with predicted responsibility, life plan change or family reaction to unwanted pregnancy may appear. Anxiety could deteriorate sexual response at every stage: desire (anxiety anticipation), arousal (emotional blockade of 'rejoicing the moment'), orgasm, mood and physiological reactions after intercourse.

A few differences between the sexual functioning of the patients diagnosed with mood disorders, especially the F31 and the F33, were indicated. Although the final score in the SFK/K questionnaire was comparable, patients with an F31 diagnosis generally presented better functions in particular areas of sexual expression. This concerned better mood before and after sexual intercourse, more positive self-image as a sexual partner and somatic reactions after orgasm. Nevertheless, the F33 patients experienced more intense body reactions during orgasm. The F31 patients were also more prone to psychological factors, which deteriorated their sexual fulfilment. Following Basson's ideas about female sexual response, hypothetically, intimate relationships of patients diagnosed with F31 or F33 influence their sexual performance. Unfortunately, our findings do not allow to draw too far conclusions in this field. The tendency of patients diagnosed with F33 to give low or medium-scored answers for the SFK/K items may also come from decreased self-esteem and cognitive distortions related to sexuality. On the

other hand, observed facts could reflect different pharmacology used to treat unipolar and bipolar mood disorders.

CONCLUSION

The Mell-Krat method is not a diagnostic tool but supports the sexological interview. The interpretation of its findings should be careful and restrained. The self-assessment questionnaire is prone to patients' cognitive distortions. This may be a serious problem, especially touching very intimate aspects of functioning, such as sexuality. Another limitation is the clear heteronormativity of the Mell-Krat. The items are designed to reflect only heterosexual experiences with no space for any alternative. The questionnaire contains items related neither to sexual orientation nor sexual identity.

Although observed in this study image of the sexual expression of female patients diagnosed with mood disorders is interesting, we suggest study replication on a bigger clinical sample. For the following studies, it is advised to choose subjects more randomly, increase demographical diversity, design more equal groups for comparisons, add other mood disorders categories and use alternatives to SFK/K sexological methods.

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