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Mental Illness Sexual Stigma: Implications for Health and Recovery

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Abstract

Objective—Among people in psychiatric care worldwide, the majority is sexually active, and sharply elevated rates of HIV infection compared to the general population have been shown. Recovery-oriented treatment does not routinely address sexuality. We examined the relationship between gender, severe mental illness diagnosis, and stigma experiences related to sexuality among people in psychiatric outpatient care.

Method—641 sexually active adults attending eight public outpatient psychiatric clinics in Rio de Janeiro were interviewed for psychiatric diagnosis and stigma experiences. Stigma mechanisms well established in the literature but not previously examined in relation to sexuality were measured with the Mental Illness Sex Stigma Questionnaire, a 27-item interview about stigma in sexual situations and activities.

Results—Experiences of stigma were reported by a majority of participants for 48% of questionnaire items. Most people reported supportive attitudes toward their sexuality from providers and family members. Those with severe mental illness diagnoses showed greater stigma on Individual Discrimination and Structural Stigma mechanisms than those with non-severe mental illness diagnoses, while there was no difference on the Social Psychological Processes (internalized stigma) mechanism. Regardless of diagnosis or gender, a majority of participants devalued themselves as sexual partners.

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Conclusions and Implications for Practice—Adults in psychiatric outpatient care frequently reported stigma experiences related to aspects of their sexual lives. From the perspectives of both HIV prevention and recovery from mental illness, examining the consequences of stigma in the sexual lives of people in psychiatric care and improving their measurement would have wide applicability.

Despite increased attention to the human rights of those with mental illness, people with psychiatric illness continue to be stigmatized (Gerlinger et al., 2013; Link, Struening, Rahav, Phelan, & Nuttbrock, 1997). The Surgeon General of the United States identified stigma as "the most formidable obstacle to future progress in the arena of mental illness and health" (Satcher, 1999). The deleterious effects of labeling someone with mental illness are pervasive and widely acknowledged (Ben-Zeev, Young, & Corrigan, 2010), and mental illness stigma has been associated with discrimination in multiple systems (e.g., education, housing, work-force, health, mental health, judicial) (Link et al., 1997; Ben-Zeev et al., 2010).

One gap in the literature on mental illness stigma concerns the extent to which it influences the sexuality and sexual behaviors of people with psychiatric disorders, important but overlooked factors in achieving a person's full potential for recovery (Kelly & Deane, 2011; Maj, 2011). Though mental illness stigma has been described as a contributor to social and sexual isolation (Wright & Gayman, 2005; Wright, Wright, Perry, & Foote-Ardah, 2007), recent evidence suggests that it also may increase sexual risk behaviors (Elkington et al., 2013; Elkington et al., 2010). Because the majority of people in psychiatric care worldwide are sexually active and people with mental illness have sharply elevated rates of HIV infection compared to the general population in most regions where they have been examined (Guimarães, McKinnon, Campos, Melo, & Wainberg, 2010; Meade & Sikkema, 2005), studies of the ways in which mental illness stigma impinges on the sexuality and sexual behaviors of people with psychiatric illnesses have emerged. Among 92 women with mental illness in New York City, experiences of discrimination due to skin color, ethnicity, sexual orientation, drug use, gender, and mental illness were associated with having a casual or sex-exchange partner. These women reported believing that having a mental illness restricted their opportunities in romantic relationships and this belief was associated with having a greater number of sexual risk behaviors (Collins et al., 2008). In a qualitative study in Brazil, mental illness stigma interfered with the ability of sexually active adults in psychiatric care to choose their sexual partners and negotiate safer sexual behaviors (Wainberg, Alfredo Gonzalez et al., 2007). In a sample of 98 adults in psychiatric outpatient settings in Rio de Janeiro, those who reported greater mental illness sexual stigma were significantly more likely to have unprotected sex and significantly less likely to have reduced the number of their sexual partners as a way to protect themselves from HIV (Guimarães et al., 2010); being male and having greater symptom severity were associated with greater sexual stigma. These studies provide evidence that people with mental illness experience and often internalize stigma related to romantic and sexual relationships and that this stigma is associated with sexual risk behaviors.

Building upon these findings, we examined the associations between stigma experiences related to sexuality, psychiatric condition, and gender among 641 people in psychiatric

outpatient care in Rio de Janeiro, Brazil. We applied modified labeling theory (Link & Phelan, 2001), which posits that stigma influences behavior through social environmental and social psychological processes. Once labeled and associated with the negative stereotypes of an undesirable trait such as mental illness (*societal stigma*), the person with that trait experiences stigma via three mechanisms: 1) *individual discrimination* in which a 'stigmatizer' engages in overt practices of discrimination against the stigmatized individual (overt acts by individuals); 2) *structural discrimination* in which institutional practices work against the stigmatized group (practices and policy); and 3) *social psychological processes* that involve the stigmatized person's own perceptions of the negative stereotypes attributed to the undesirable trait (internalized stigma, self-devaluing), and expect discrimination (Link, Cullen, & Struening, 1989). Expectations of rejection can lead to reduced confidence, constricted social networks, depression, and low self-esteem (Link et al., 1997; Wainberg, Alfredo Gonzalez et al., 2007; Link et al., 1989; Rosenfield, Vertefuille, & McAlpine, 2000).

We describe the role of gender and of having a severe mental illness diagnosis in sexual stigma experiences through previously described stigma mechanisms. We expected that people with severe mental illness (i.e., schizophrenia, schizoaffective disorder, bipolar disorder, major depression with psychotic features and psychosis not otherwise specified) would show higher scores for all three stigma mechanisms than those without severe mental illness, and that men would experience greater sexual stigma than women (Elkington et al., 2010).

Methods

Participants were recruited from eight public outpatient psychiatric clinics in Rio de Janeiro between June 2007 and November 2009 as part of an NIMH-funded HIV prevention trial (R01 MH65163: Wainberg) among Brazilian adults in psychiatric care who reported sexual activity in the previous three months. We report on psychiatric diagnosis (Mini-International Neuropsychiatric Interview Plus; MINI-Plus) and mental illness sexual stigma data collected at baseline by trained interviewers (Amorim, 2000; Sheehan et al., 1998).

We measured mental illness stigma using the Mental Illness Sex Stigma Questionnaire (MISS-Q), which applies Link and Phelan's mental illness stigma model (Link & Phelan, 2001) to sexual situations and behaviors. The MISS-Q originated with people in psychiatric outpatient settings in the U.S. (Collins et al., 2008), was adapted and tested in Brazil (Elkington et al., 2010) with good test-retest reliability (k= .75), and has been used in a U.S. pilot study for adolescents with psychiatric disorders (Elkington et al., 2013; Elkington et al., 2012). The MISS-Q is a face-to-face interview containing 27 items assessing three mental illness stigma mechanisms as follows: 1) *Individual discrimination* (6 items) includes five general mental illness individual discrimination items (e.g. "How often have you been made fun of because you have a mental illness?"); and one sexual relationship-specific item (e.g. "How many of the people you have wanted to have a romantic or sexual relationship with said they didn't want to be involved with you because you were a user of mental health services?"); 2) *Structural discrimination* (9 items) includes sexual stigma from mental health professionals (e.g. "Staff members make patients feel comfortable to talk about sexuality and sex issues."); and from family members (e.g. "How often has someone in your family

ever said that since you are a user of mental health services you should not have sex?"); and 3) *Social psychological processes* (12 items) focused on four domains: devaluation, coping, attractiveness and locus of sexual control. Devaluation captures perceptions among people with mental illness of devaluation of their sexuality by other people (e.g. "Most people don't show interest in having a romantic or sexual relationship with someone who has a mental illness"). Coping focuses on the strategies employed (e.g. "You avoid approaching someone you are interested in having a romantic or sexual relationship with if you think he/she has negative attitudes about users of mental health services"). Attractiveness elicits internalized perceptions (e.g. "Having a mental illness makes you feel less attractive than other women/men"). Locus of sexual control prompts for choice in sexual relationships (e.g. "In order to be sexually active, you always do what other people ask of you"). All MISS-Q items had 4-point Likert—type response options (never; rarely; sometimes; often).

As a measure in development, MISS-Q scales (combinations of the 27 items) were constructed and tested. Internal consistency of three scales corresponding to the three stigma mechanisms was examined with ordinal alpha (Zumbo, Gadermann, & Zeisser, 2007) computed with R (http://www.R-project.org) psych package (Revelle, 2011). Scales showed moderate to good internal consistency: Individual discrimination: 6 items, ordinal alpha 0.87; Structural stigma: 9 items, ordinal alpha 0.79; and Social psychological processes: 12 items, ordinal alpha 0.62. Descriptive statistics (mean, standard deviation [SD], and range) for each scale were run for each of the three scales stratified by gender and severe mental illness category. Student's t-tests were carried out to examine mean differences between genders within each diagnostic group (severe mental illness /not severe mental illness). Significance was adjusted for multiple comparisons and was assessed at the .017 level for three comparisons.

Results

Participant Characteristics

We recruited 641 people in psychiatric outpatient treatment settings who met eligibility criteria (i.e., sexually active in the last three months; receiving care at a study site; 18–80 years old; not actively suicidal or acutely psychotic; primary diagnosis not alcohol/drug use disorder or developmental disability). Participants were 58% female with a mean age of 42.5 (SD=10.3, range=18–76) and racially diverse (19.5% black, 32.8% white and 47.7% multiracial). The most common psychiatric disorders were consistent with severe mental illness for 65% of the women and 78% of the men. Overall, 33.0% had schizophrenia; 21.7% had bipolar disorder; 20.3% had non-psychotic depression; 10.3% had depression with psychosis; 6.2% had anxiety disorders; 4.8% had psychosis not otherwise specified; 3.1% schizoaffective disorder; and 0.6% other diagnoses. A majority of participants (66.6%) reported being currently involved in a relationship, and just under half (46.8%) were married.

Stigma, Gender, and Severe Mental Illness

Table 1 shows the proportion of participants who endorsed each specific stigma item overall and stratified by gender and diagnosis category. Proportions of responses to items presented

are dichotomized versions (i.e., rarely/never and sometimes/often, or disagree and agree) of all 27 MISS-Q items.

Table 2 shows gender differences overall and between the participants with severe mental illness and those with non-severe mental illness diagnoses in the three stigma mechanism scales. Contrary to our expectations, there were no gender differences overall in terms of scale scores on the three stigma mechanisms. Within gender, diagnostic differences were found for two of the three stigma mechanisms we examined.

Individual discrimination—Experiences of individual discrimination were common among participants, with 49.1% to 63.8% of all participants endorsing five of the six items comprising this scale, and those with severe mental illness diagnoses endorsing these items in higher proportions than those with non-severe mental illness diagnoses. For both men and women, the scale score was significantly higher for those with severe mental illness diagnoses than those with non-severe mental illness diagnoses.

Structural discrimination—Most participants (66.3% to 97.3% for eight of nine items) reported supportive attitudes toward their sexuality and romantic relationships from both providers and family members. For both men and women, those with severe mental illness diagnoses reported significantly greater Structural discrimination scale scores than those with non-severe mental illness diagnoses, indicating greater experiences of stigma.

Social psychological processes—Slightly greater variability was observed in the proportion of participants endorsing items on the Social psychological processes mechanism. The Social psychological processes scale was not significantly different by gender or severe mental illness diagnosis.

<u>Devaluation:</u> Items related to devaluation were endorsed by 49.0% to 81.0% of participants overall. Men and women with and without severe mental illness diagnoses reported similar beliefs that most people don't show romantic/sexual interest in those with mental illness and think that people with mental illness wouldn't be good partners for people without mental illness. Less than one-third of participants said they would "feel more comfortable having a romantic or sexual relationship with people who also have mental illness"

Coping: Those items related to coping were endorsed by 24.5% to 68.5% of participants. Less than half of the participants (34–44%) said that they hid their mental illness diagnosis from potential romantic or sexual partners; about two-thirds said that they explained what mental illness is to potential partners. Nearly two-thirds of participants said they avoid approaching potential partners when they believe such partners have negative attitudes about mental illness

<u>Low-attractiveness</u>: Items related to low attractiveness were endorsed by 40.9% to 56.5% of participants. Just over one-half of participants felt that mental illness had a negative impact on their opportunities for sexual relationships, whereas fewer (34 to 46%) reported that having a mental illness made them feel less attractive than other women/men.

<u>Locus of control</u>: Items related to locus of sexual control were endorsed by 23.7% to 90.0% of participants. One quarter of all participants agreed with the statement "in order to be sexually active, you always do whatever people ask of you."

Discussion

In the first large-scale study to apply the three mental illness stigma mechanisms proposed by Link and Phelan to sexuality, we found that our sample of people in psychiatric care in Brazil reported stigma experiences related to some aspects of their sexual lives in high proportions. Men and women with severe mental illness diagnoses reported greater individual discrimination and structural stigma than those with non-severe mental illness diagnoses, partially supporting one of our hypotheses. There were no differences between groups on the psychosocial processes scale. We found no gender differences overall in terms of scale scores on the three stigma mechanisms, which refuted one of our hypotheses. Our study had a much larger sample size than the previous study reporting that men experienced greater sexual stigma (Elkington et al., 2010).

Reports of individual discrimination were common, with one-quarter to three-quarters of participants responding that they had been treated in discriminatory ways because of having a mental illness. However, users of psychiatric services in Brazil experienced relatively less structural discrimination within their mental health care settings and their families than they did the two other mechanisms of stigma. More than three quarters of participants reported that they did not receive negative messages from their families about having sexual or romantic relationships. Nonetheless, although more than 90% of participants reported that they had never been told by a mental health care provider not to have sex or romantic relationships, almost 40% of men and women with severe mental illness diagnoses experienced providers as not supportive when they tried to talk to them about sexual issues. Both women and men with severe mental illness diagnoses reported more non-supportive attitudes from mental health care providers about the sexual matters that we examined than did participants who had non-severe mental illness diagnoses.

Regardless of diagnosis, both men and women in this study believed that most people consider those with mental illness as devalued sexual/romantic partners. These high scores suggest that holding beliefs that mental illness makes someone a less desirable sexual or romantic partner transcends experiences of overt discrimination and reflect possible internalized stigma not only for those diagnosed with psychotic disorders but also among those diagnosed with depressive and anxiety disorders. The finding that less than one-third of participants said that they would "feel more comfortable having a romantic or sexual relationship with people who also have mental illness" is also suggestive of internalized stigma. Our results also suggest that people receiving psychiatric care make assessments of whether potential partners have negative attitudes toward people with mental illness and may cope by avoiding those individuals or, by contrast, as more than half of participants reported, not hiding their mental illness diagnosis and/or trying to explain their conditions.

While people with severe mental illness diagnoses may appear to be more visibly ill as manifested by reports of greater discrimination experiences, those with non-severe mental

illness diagnoses appeared to internalize sexual stigma in similar proportions as those with severe mental illness diagnoses. This is consistent with a recent report by Vucic-Peitl, Peitl and Pavlovic (2011), which found that when compared to a healthy control group, people with either schizophrenia or depression scored significantly higher on sexual incompetence and significantly lower on sexual satisfaction, and that these two diagnosed groups were not significantly different from one another.

Most participants reported that family members and mental health care providers were not conveying negative messages to them about their sexuality. Therefore, efforts by providers and family members to help people in psychiatric care build skills for healthy sexuality and romantic relationships may be acceptable content for interventions. Many people in psychiatric care try to explain mental illness to potential partners, an effort that could be supported with skills-building workshops.

Limitations

Our convenience sample of people receiving treatment in public outpatient psychiatric care in Rio de Janeiro may not be representative of people receiving care in other settings and may limit the generalizability of our measure. Sexuality and sexual expression are integral to life in Brazil, and Brazil's effective response to the HIV epidemic is based on the capacity of HIV prevention programs to address sexuality more openly than in most other countries (Wainberg, Alfredo Gonzalez et al., 2007; Wainberg, McKinnon et al., 2007; Daniel & Parker, 1993; Paiva, 2002). Such attitudes may have mitigated the structural stigma experiences of our participants. Further, this was a sample of sexually active people in psychiatric care who had rates of ongoing partnerships and marriage higher than those sampled in prior HIV-related studies (Guimarães et al., 2010; Meade & Sikkema, 2005). We cannot say whether this is a sampling artifact, a milestone associated with more sex-positive attitudes of the local culture, or is attributable to other factors that we did not measure. Nor can we gauge whether other groups receiving psychiatric services that do not have a large proportion of people in committed relationships would have even higher rates of mental illness sexual stigma.

We did not examine direct associations to risk behavior, nor did we measure other factors that might influence sexual risk-taking such as substance use and a past history of trauma. Further, we did not have a large enough sample of people who identified as gay, lesbian, bisexual or transgender to explore how sexual orientation and/or homophobia might influence mental illness sexual stigma or risk behavior.

Another limitation stems from the use of a non-validated questionnaire rather than developed and normed scales; future work could build upon the scales we developed to reliably and validly measure dimensions of mental illness sexual stigma and their associations to multiple aspects of sexuality including identity, expression, intimacy, behavior, risk behavior, and sexually transmitted infections including HIV. The MISS-Q's potential for applicability in research on mental illness recovery or as a clinical tool for use in treatment settings requires further study.

Conclusions

This large sample of people in psychiatric care reported stigma experiences related to their sexuality and sexual autonomy that appear to cut across diagnostic and gender groups. A strong recovery movement is underway to help people with mental illness diagnoses overcome stigma and build lives that allow them to become full participants in their communities. Recovery-oriented services are focused on the attainment of a meaningful and valued life rather than simply on the absence of symptoms (Mueser, Deavers, Penn, & Cassisi, 2013). However, few evidence-based recovery-oriented interventions are focused on social functioning, and it is rarer still that intimate relationships are addressed, even though they are one of the foundations of social inclusion. General population initiatives to build skills in the area of healthy sexuality are often incorrectly seen as promoting sexual activity, and similar beliefs may be operating with this population.

Our data shed light on the importance of changing this pattern, which could be accomplished by improving the skills people in psychiatric care have to build healthy sexual and romantic relationships, avoid potentially harmful relationships, and reduce internalized stigma as necessary aspects of rehabilitation and recovery for people in psychiatric care. Participation in these efforts by mental health programs and the clinicians and administrators who work within them will require a fundamental understanding of how to be comfortable and to openly address patient sexuality as a legitimate focus of treatment.

Recognizing that the consequences of stigma are debilitating, developing assessments that would have wide applicability and improve the effectiveness of public health programs is also important (Van Brakel, 2006). The three stigma mechanisms we investigated using the MISS-Q successfully measured certain aspects of mental illness sexual stigma and showed some ability to differentiate these experiences on the basis of diagnostic group and gender.

Whether seen from a health perspective (HIV prevention) or from a recovery from mental illness perspective (quality of life, physical health and meaningful social engagement), the importance of addressing the sexual lives of people in psychiatric care is increasingly clear.

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Table 1

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| | Not SMI N=59 | 1Mi | SMI N=210 | 19 | Not SMI N=130 | MI 8 | SMI N=242 | 12 |
| | % | п | % | п | % | п | % | п |
| How often has someone ever | | | | | | | | |
| • made fun of you because you have a mental illness? (sometimes or often) | 49% | 29 | 64% | 134 | %09 | 65 | 73% | 177 |
| • called you "crazy", "loca/o" or "nuts"? (sometimes or often) | %69 | 35 | 64% | 134 | 49% | 4 | 73% | 176 |
| • ignored you or not taken seriously what you had to say because you have a mental illness? (sometimes or often) | 44% | 26 | %09 | 127 | 44% | 57 | %69 | 167 |
| How often have you ever | | | | | | | | |
| • been treated differently from others after they learned that you had a mental illness? (sometimes or often) | 44% | 26 | %09 | 126 | 45% | 28 | %19 | 163 |
| • experienced people trying to take advantage of you because they know that you have a mental illness? (sometimes or often) | 34% | 20 | %09 | 126 | 27% | 35 | %95 | 134 |
| Thinking about all the people you had or wanted to have a romantic or sexual relationship with | | | | | | | | |
| • How many of them said they didn 't want to be involved with you because you were a user of mental health services? (most of the time or always) | 3% | 7 | %8 | 17 | 2% | 3 | %9 | 15 |
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| From Their Mental Health Care Providers | | Ì | | | | | | |
| Mental health care providers | | | | | | | | |
| • make patients feel comfortable to talk about sexuality and sex issues (agree) | 78% | 46 | %02 | 147 | 75% | 95 | 71% | 170 |
| • are supportive when clients express interest in having a romantic or sexual relationship (agree) | %69 | 38 | 73% | 149 | %02 | 83 | %19 | 155 |
| • are not supportive when users talk about sex issues (agree) | 21% | Ξ | 39% | 77 | 18% | 21 | 38% | 68 |
| How often has a mental health care provider ever said that since you are a user of mental health services | | | | | | | | |
| • you should not have sex? (sometimes or often) | 2% | _ | 7% | 4 | %0 | 0 | 4% | 10 |
| • you should not have a romantic or sexual relationship with other patients? (sometimes or often) | %0 | 0 | %8 | 17 | 2% | 2 | 2% | 11 |
| • you should not have a romantic or sexual relationship with people who do not have a mental illness? (sometimes or often) 0% | %0 | 0 | 4% | 6 | 1% | _ | 3% | 7 |
| | | | | | | | | |

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Structural discrimination stratified by gender and comparing persons without and with severe mental illness (SMI)

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| % | n | % | u | % | п | % | u | | | |
| How often has someone in your family ever said that since you are a user of mental health services | | | | | | | | | | |
| • you should not have sex? (sometimes or often) | 4 | 12% | 25 | %9 | ∞ | 14% | 34 | | | |
| • you should not have a romantic or sexual relationship with other patients? (sometimes or often) | 7 % | 21% | 4 | 12% | 15 | 23% | 99 | | | |
| • you should not have a romantic or sexual relationship with people who do not have a mental illness? (sometimes or often) 3% | 6 2 | 10% | 21 | 2% | 9 | 12% | 30 | | | |
| Social psychological processes stratified by gender and comparing persons without and with severe mental illness (SMI) | | | | | | | | | | |
| | | | | MEN | | | 5 | WOMEN | 7 | |
| | | ~ | Not SMI N=59 | | SMI N=210 | | Not SMI N=130 | | SMI N=242 | 1 |
| | | •` | %a | % u | п | | u % | | u % | _ |
| Devaluation | | | | | | | | | | |
| Most people | | | | | | | | | | |
| •don't show interest in having a romantic or sexual relationship with someone who has a mental illness. | | ∞ | 81% | 48 77% | | 162 89 | 89% 11 | 113 80 | 80% 194 | 4 |
| •think that a person with mental illness won't be a good partner for someone who doesn't have a mental illness. | | 7 | 71% 4 | 42 68% | | 142 84 | 84% 107 | | 73% 175 | 'n |
| •when they find out someone is a user of mental health services, don't think that person is sexually desirable. | | 7: | 75% 4 | 42 66% | | 137 69 | 88 %69 | | 66% 15 | 159 |
| •think that users of mental health services should not have sexual or romantic relationships. | | 4 | . 44% | 25 43% | % 91 | | 50% 64 | | 55% 133 | 65 |
| Coping | | | | | | | | | | |
| • You hide the fact that you have been diagnosed with a mental illness from people you are interested in having a romantic or sexual relationship with. | | 4 | 42% | 25 44% | | 93 34 | 34% 43 | 3 39% | % 93 | 8 |
| • You feel more comfortable having a romantic or sexual relationship with people who also have used mental health services. | | 2 | 27% | 16 33% | | 67 16 | 16% 20 | | 23% 54 | 4 |
| • You avoid approaching someone you are interested in having a romantic or sexual relationship with if you think he/she has negative attitudes about users of mental health services. | e attitud | | 63% | 37 67% | | 140 65 | 65% 82 | 2 75% | % 180 | 0 |
| • You explain what mental illness is to those you are interested in having a sexual or romantic relationship with. | | 7. | 72% | 41 66% | | 138 70 | 70% 91 | | 69% 168 | <u>∞</u> |
| Low Attractiveness | | | | | | | | | | |
| • Having a mental illness has a negative impact on your opportunities for sexual relationships. | | Š | 999 | 33 55% | | 116 58 | 7 %85 | 76 57 | 57% 137 | 7 |
| • Having a mental illness makes you feel less attractive than other women/men. | | 4 | 41% | 24 34% | | 72 42 | 42% 55 | 5 46% | % 1111 | 1 |
| Locus of Sexual Control | | | | | | | | | | |
| • You are the one who chooses the course of your sexual life. | | 6 | 63% | 55 91% | | 192 87 | 87% 11 | 113 88 | 88% 214 | 4 |
| • In order to be sexually active, you always do what other people ask of you. | | 2. | 78% | 17 24% | % 51 | | 23% 30 | 0 23% | % 55 | ر ا |
| | | | | | | | | | | |

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Table 2

Mental illness sexual stigma scales by gender and comparing persons without and with severe mental illness (SMI) stratified by gender

| | | | | Gender | | | Men | | | Women | |
|-------------------------------------|-------|---|--------------|---------------|---------|---------------------|--|---------|---------------------|--------------|---------|
| | | Overall sample N=641 | Men n=269 | Women $n=372$ | p-value | Not SMI n=59 | $\sup_{n=210}$ | p-value | Not SMI n=130 | SMI $n=242$ | p-value |
| | Range | Range Mean (SD), Min-Max Mean (SD) Mean (SD) | Mean (SD) | Mean (SD) | | Mean (SD) Mean (SD) | Mean (SD) | | Mean (SD) Mean (SD) | Mean (SD) | |
| Individual discrimination 0–24 7.8 | 0–24 | 7.89 (4.59), 0–18 7.72 (4.51) 8.01 (4.65) .425 6.02 (4.35) 8.20 (4.44) .001 5.86 (4.32) 9.17 (4.41) <.001 | 7.72 (4.51) | 8.01 (4.65) | .425 | 6.02 (4.35) | 8.20 (4.44) | .001 | 5.86 (4.32) | 9.17 (4.41) | <.001 |
| Structural stigma | 0–36 | 4.51 (3.55), 0–21 | 4.72 (3.38) | 4.35 (3.66) | .199 | 3.47 (2.71) | 4.72 (3.38) 4.35 (3.66) .199 3.47 (2.71) 5.07 (3.47) <.001 3.18 (2.87) 4.98 (3.89) <.001 | <.001 | 3.18 (2.87) | 4.98 (3.89) | <.001 |
| Social psychological processes 0–48 | 0-48 | 17.63 (5.01), 2–33 17.30 (5.30) 17.86 (4.78) .161 17.83 (4.54) 17.15 (5.49) .386 17.42 (4.22) 18.10 (5.05) .170 | 17.30 (5.30) | 17.86 (4.78) | .161 | 17.83 (4.54) | 17.15 (5.49) | .386 | 17.42 (4.22) | 18.10 (5.05) | .170 |