Psychiatric Rehabilitation Journal

Mental Illness Sexual Stigma: Implications for Health and Recovery

Milton L. Wainberg, Francine Cournos, Melanie M. Wall, Andrea Norcini Pala, Claudio Gruber Mann, Diana Pinto, Veronica Pinho, and Karen McKinnon

Online First Publication, March 31, 2016. http://dx.doi.org/10.1037/prj0000168

CITATION

Wainberg, M. L., Cournos, F., Wall, M. M., Norcini Pala, A., Mann, C. G., Pinto, D., Pinho, V., & McKinnon, K. (2016, March 31). Mental Illness Sexual Stigma: Implications for Health and Recovery. *Psychiatric Rehabilitation Journal*. Advance online publication. http://dx.doi.org/10.1037/prj0000168

Mental Illness Sexual Stigma: Implications for Health and Recovery

Milton L. Wainberg

New York State Psychiatric Institute, New York, New York, and Columbia University, College of Physicians and Surgeons

Francine Cournos Columbia University, Mailman School of Public Health

Melanie M. Wall

New York State Psychiatric Institute, New York, New York, Columbia University, College of Physicians and Surgeons, and Columbia University, Mailman School of Public Health

Andrea Norcini Pala New York State Psychiatric Institute, New York, New York

Claudio Gruber Mann Escola Nacional de Saúde Pública Sergio Arouca, Fundação Oswaldo Cruz (Fiocruz)

Diana Pinto Federal University of Rio de Janeiro Estate

Veronica Pinho and Karen McKinnon

New York State Psychiatric Institute, New York, New York, and Columbia University, College of Physicians and Surgeons

Objective: The majority of people in psychiatric care worldwide are sexually active, and studies have revealed sharply elevated rates of HIV infection in that group compared with the general population. 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: Sexually active adults attending 8 public outpatient psychiatric clinics in Rio de Janeiro (N = 641) 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 did those with nonsevere mental illness diagnoses, whereas 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. 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, examinations of the consequences of stigma in the sexual lives of people in psychiatric care and improving their measurement would have wide applicability.

Keywords: stigma, severe mental illness, sexual relationships, recovery, sexual health

Milton L. Wainberg, New York State Psychiatric Institute, New York, New York, and Department of Psychiatry, Columbia University, College of Physicians and Surgeons; Francine Cournos, Department of Epidemiology, Columbia University, Mailman School of Public Health; Melanie M. Wall, New York State Psychiatric Institute, Department of Psychiatry, Columbia University, College of Physicians and Surgeons, and Department of Biostatistics, Columbia University, Mailman School of Public Health; Andrea Norcini Pala, New York State Psychiatric Institute; Claudio Gruber Mann, Escola Nacional de Saúde Pública Sergio Arouca, Fundação Oswaldo Cruz (Fiocruz); Diana Pinto, Federal University of Rio de Janeiro Estate; Veronica Pinho and Karen McKinnon, New York State Psychiatric Institute, and Department of Psychiatry, Columbia University, College of Physicians and Surgeons.

This research was supported by Grant R01-MH65163 (Principal Investigator: Milton L. Wainberg) from the National Institute of Mental Health and a center grant (P30-MH43520; Principal Investigator: Anke A. Ehrhardt) from the National Institute of Mental Health to the HIV Center for Clinical and Behavioral Studies at NY State Psychiatric Institute and Columbia University. The authors gratefully acknowledge the enormous contributions made to the PRISSMA Project by people receiving care at public mental health clinics of the City of Rio de Janeiro, the mental health care providers, and other staff at these institutions.

Correspondence concerning this article should be addressed to Milton L. Wainberg, New York State Psychiatric Institute, 1051 Riverside Drive, Unit 24, New York, NY 10032. E-mail: mlw35@cumc.columbia.edu

2 WAINBERG ET AL.

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, workforce, 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, which are 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., 2010, 2013). 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 with 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 were 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 on 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: (a) *individual discrimination*, in which a "stigmatizer" engages in

overt practices of discrimination against the stigmatized individual (overt acts by individuals); (b) *structural discrimination*, in which institutional practices work against the stigmatized group (practices and policy); and (c) *social psychological processes*, which 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, Shrout, & Dohrenwend, 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).

Method

Participants were recruited from eight public outpatient psychiatric clinics in Rio de Janeiro between June 2007 and November 2009 as part of a National Institute of Mental Health-funded HIV prevention trial among Brazilian adults in psychiatric care who reported sexual activity in the previous 3 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 (2001) mental illness stigma model to sexual situations and behaviors. The MISS-Q originated with people in psychiatric outpatient settings in the United States (Collins et al., 2008; Wright et al., 2007), 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., 2012, 2013). The MISS-Q is a face-to-face interview containing 27 items assessing three mental illness stigma mechanisms as follows: (a) 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?"); (b) 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 (c) 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 (1 = never, 2 = rarely, 3 = sometimes, 4 = 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: six items, ordinal alpha 0.87; structural stigma: nine items, ordinal alpha 0.79; and social psychological processes: 12 items, ordinal alpha 0.62. Descriptive statistics (mean, standard deviation, 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 3 months, receiving care at a study site, 18 to 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 nonpsychotic 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 nonsevere

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 nonsevere mental illness diagnoses. For both men and women, the scale score was significantly higher for those with severe mental illness diagnoses than those with nonsevere 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 nonsevere 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.

Devaluation. 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 do not show romantic/sexual interest in those with mental illness and think that people with mental illness would not 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.

Low attractiveness. 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 and men.

Locus of control. 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 (2001) to sex4 WAINBERG ET AL.

Table 1
Individual Discrimination, Structural Discrimination, and Social Psychological Processes Stratified by Gender and Comparing Persons Without and With Severe Mental Illness (SMI)

		Men				Women			
		No SMI $(N = 59)$		SMI (N = 210)		No SMI $(N = 130)$		SMI (N = 242)	
MISS-Q items	%	n	%	n	%	n	%	n	
How often has someone ever									
made fun of you because you have a mental illness? (sometimes or often)	49	29	64	134	50	65	73	177	
called you "crazy", "loca/o" or "nuts"? (sometimes or often)	59	35	64	134	49	64	73	176	
ignored you or not taken seriously what you had to say because you have a mental illness? (sometimes or often)	44	26	60	127	44	57	69	167	
How often have you ever	44	20	00	127	44	37	09	10	
been treated differently from others after they learned that you had a mental illness?									
(sometimes or often)	44	26	60	126	45	58	67	163	
experienced people trying to take advantage of you because they know that you									
have a mental illness? (sometimes or often)	34	20	60	126	27	35	56	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	2	8	17	2	3	6	1.5	
Mental health care providers	5	-	O	17	-	3	O	1.	
make patients feel comfortable to talk about sexuality and sex issues (agree)	78	46	70	147	75	95	71	170	
are supportive when clients express interest in having a romantic or sexual									
relationship (agree)	69	38	73	149	70	83	67	155	
are not supportive when users talk about sex issues (agree)	21	11	39	77	18	21	38	89	
How often has a mental health care provider said, "Because you are a user of mental health services"									
you should not have sex (sometimes or often)	2	1	7	14	0	0	4	10	
you should not have a romantic or sexual relationship with other patients	_	-	,	1-7	Ü	O	-	10	
(sometimes or often)	0	0	8	17	2	2	5	11	
you should not have a romantic or sexual relationship with people who do not have									
a mental illness (sometimes or often)	0	0	4	9	1	1	3	7	
How often has someone in your family ever said that since you are a user of mental									
health services	7	4	12	25		8	1.4	34	
you should not have sex (<i>sometimes</i> or <i>often</i>) you should not have a romantic or sexual relationship with other patients	/	4	12	25	6	0	14	34	
(sometimes or often)	12	7	21	44	12	15	23	56	
you should not have a romantic or sexual relationship with people who do not have									
a mental illness (sometimes or often)	3	2	10	21	5	6	12	30	
Most people									
don't show interest in having a romantic or sexual relationship with someone who	0.4	40		1.00	0.0	440	0.0	40	
has a mental illness	81	48	77	162	89	113	80	194	
think that a person with a mental illness won't be a good partner for someone who doesn't have a mental illness	71	42	68	142	84	107	73	175	
when they find out someone is a user of mental health services don't think that	/1	42	00	142	04	107	13	1/.	
person is sexually desirable	75	42	66	137	69	88	66	159	
think that users of mental health services should not have sexual or romantic									
relationships	44	25	43	91	50	64	55	133	
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	42	25	44	93	34	43	39	93	
You feel more comfortable having a romantic or sexual relationship with people	72	23	77)3	54	73	37).	
who also have used mental health services	27	16	33	67	16	20	23	54	
You avoid approaching someone you are interested in having a romantic or sexual									
relationship with if you think she/she has negative attitudes about users of mental									
health services	63	37	67	140	65	82	75	180	
You explain what mental illness is to those you are interested in having a sexual or	72	41		120	70	0.1	60	1/0	
romantic relationship with Low attractiveness	72	41	66	138	70	91	69	168	
Having a mental illness has a negative impact on your opportunities for sexual									
relationships	56	33	55	116	58	76	57	137	
Having a mental illness makes you feel less attractive than other women/men	41	24	34	72	42	55	46	111	
Locus of sexual control									
You are the one who chooses the course of your sexual life	93	55	91	192	87	113	88	214	
To be sexually active, you always do what other people ask of you	29	17	24	51	23	30	23	55	

Note. MISS-Q = Mental Illness Sex Stigma Questionnaire.

This document is copyrighted by the American Psychological Association or one of its allied publishers. This article is intended solely for the personal use of the individual user and is not to be disseminated broadly.

Mental Illness Sexual Stigma Scales by Gender and Comparing Persons Without and With Severe Mental illness (SMI) Straiffied by Gender
 Table 2

Men Women	SMI No SMI SMI $(n = 210)$ $(n = 130)$ $(n = 242)$.	8.20 (4.44) .001 5.86 (4.32) 9.17 (4.41) <.001 5.07 (3.47) <.001 3.18 (2.87) 4.98 (3.89) <.001 17.15 (5.49) .386 17.42 (4.22) 18.10 (5.05) .170
M	No SMI $(n = 59)$	M (SD)	6.02 (4.35) 3.47 (2.71) 17.83 (4.54)
		d	.425 .199 .161
Gender	Women $(n = 372)$	M (SD)	8.01 (4.65) 4.35 (3.66) 17.86 (4.78)
	Men $ (n = 269)$	M (SD)	7.72 (4.51) 4.72 (3.38) 17.30 (5.30)
	Overall sample $(N = 641)$	Range M (SD) Min-Max	0-24 7.89 (4.59) 0-18 0-36 4.51 (3.55) 0-21 0-48 17.63 (5.01) 2-33
		Range	0-24 0-36 0-48
		Scale	Individual discrimination Structural stigma Social psychological processes

uality, 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 nonsevere 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 onequarter 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 nonsupportive attitudes from mental health care providers about the sexual matters that we examined than did participants who had nonsevere 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.

Although people with severe mental illness diagnoses may appear to be more visibly ill as manifested by reports of greater discrimination experiences, those with nonsevere 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.

6 WAINBERG ET AL.

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 (Daniel & Parker, 1993; Paiva, 2002; Wainberg, Alfredo Gonzalez, et al., 2007; Wainberg, McKinnon, et al., 2007). 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 nonvalidated 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.

References

- Amorim, P. (2000). Mini International Neuropsychiatric Interview (MINI): Validação de entrevista breve para diagnóstico de transtornos mentais. *Revista Brasileira de Psiquiatria*, 22, 106–115. http://dx.doi.org/10.1590/S1516-44462000000300003
- Ben-Zeev, D., Young, M. A., & Corrigan, P. W. (2010). DSM-V and the stigma of mental illness. *Journal of Mental Health (Abingdon, England)*, 19, 318–327. http://dx.doi.org/10.3109/09638237.2010.492484
- Collins, P. Y., Elkington, K. S., von Unger, H., Sweetland, A., Wright, E. R., & Zybert, P. A. (2008). Relationship of stigma to HIV risk among women with mental illness. *American Journal of Orthopsychiatry*, 78, 498–506. http://dx.doi.org/10.1037/a0014581
- Daniel, H., & Parker, R. (1993). Sexuality, politics and AIDS in Brazil. In Another World? London, England: Falmer Press/Taylor & Francis.
- Elkington, K. S., Hackler, D., McKinnon, K., Borges, C., Wright, E. R., & Wainberg, M. L. (2012). Perceived mental illness stigma among youth in psychiatric outpatient treatment. *Journal of Adolescent Research*, 27, 290–317. http://dx.doi.org/10.1177/0743558411409931
- Elkington, K. S., Hackler, D., Walsh, T. A., Latack, J. A., McKinnon, K., Borges, C., . . . Wainberg, M. L. (2013). Perceived mental illness stigma, intimate relationships and sexual risk behavior in youth with mental illness. *Journal of Adolescent Research*, 28, 378–404. http://dx.doi.org/ 10.1177/0743558412467686
- Elkington, K. S., McKinnon, K., Mann, C. G., Collins, P. Y., Leu, C. S., & Wainberg, M. L. (2010). Perceived mental illness stigma and HIV risk behaviors among adult psychiatric outpatients in Rio de Janeiro, Brazil. *Community Mental Health Journal*, 46, 56–64. http://dx.doi.org/10 .1007/s10597-009-9209-4
- Gerlinger, G., Hauser, M., De Hert, M., Lacluyse, K., Wampers, M., & Correll, C. U. (2013). Personal stigma in schizophrenia spectrum disorders: A systematic review of prevalence rates, correlates, impact and

- interventions. World Psychiatry; Official Journal of the World Psychiatric Association, 12, 155–164. http://dx.doi.org/10.1002/wps.20040
- Guimarães, M. D., McKinnon, K., Campos, L. N., Melo, A. P., & Wainberg, M. (2010). HIV risk behavior of psychiatric patients with mental illness: A sample of Brazilian patients. *Revista Brasileira de Psiquiatria*, 32, 349–360. http://dx.doi.org/10.1590/S1516-44462010000400007
- Kelly, P. J., & Deane, F. P. (2011). Do therapeutic homework assignments address areas of need for individuals with severe mental illness? *Community Mental Health Journal*, 47, 194–200. http://dx.doi.org/10.1007/ s10597-009-9217-4
- Link, B. G., Cullen, F., Struening, E., Shrout, P. E., & Dohrenwend, B. P. (1989). A modified label theory approach to mental disorders: An empirical assessment. *American Sociological Review*, 54, 400–423. http://dx.doi.org/10.2307/2095613
- Link, B. G., & Phelan, J. C. (2001). Conceptualizing stigma. Annual Review of Sociology, 27, 363–385. http://dx.doi.org/10.1146/annurev .soc.27.1.363
- Link, B. G., Struening, E. L., Rahav, M., Phelan, J. C., & Nuttbrock, L. (1997). On stigma and its consequences: Evidence from a longitudinal study of men with dual diagnoses of mental illness and substance abuse. *Journal of Health and Social Behavior*, 38, 177–190. http://dx.doi.org/10.2307/2955424
- Maj, M. (2011). The rights of people with mental disorders: WPA perspective. *Lancet*, 378, 1534–1535. http://dx.doi.org/10.1016/S0140-6736(11)60745-9
- Meade, C. S., & Sikkema, K. J. (2005). HIV risk behavior among adults with severe mental illness: A systematic review. *Clinical Psychology Review*, 25, 433–457. http://dx.doi.org/10.1016/j.cpr.2005.02.001
- Mueser, K. T., Deavers, F., Penn, D. L., & Cassisi, J. E. (2013). Psychosocial treatments for schizophrenia. *Annual Review of Clinical Psychology*, 9, 465–497. http://dx.doi.org/10.1146/annurev-clinpsy-050212-185620
- Paiva, V. (2002). Sem mágicas soluções: A prevenção e o cuidado em HIV/AIDS e o processo de emancipação psicossocial [Beyond magical solutions: prevention and care in HIV/AIDS and psychosocial emancipation process]. *Interface: Comunicacao, Saude, Educacao, 6*, 25–38. http://dx.doi.org/10.1590/S1414-32832002000200003
- Revelle, W. (2011). An overview of the psych package. Retrieved from http://www.personalitytheory.org/r/book/overview.pdf
- Rosenfield, S., Vertefuille, J., & McAlpine, D. D. (2000). Gender stratification and mental health: An exploration of dimensions of the self.

- Social Psychology Quarterly, 63, 208-223. http://dx.doi.org/10.2307/2695869
- Satcher, D. (1999). Mental Health: A report of the Surgeon General. Washington, DC: Department of Health and Human Services.
- Sheehan, D. V., Lecrubier, Y., Sheehan, K. H., Amorim, P., Janavs, J., Weiller, E., . . . Dunbar, G. C. (1998). The Mini-International Neuropsychiatric Interview (M.I.N.I.): The development and validation of a structured diagnostic psychiatric interview for DSM–IV and ICD-10. Journal of Clinical Psychiatry, 59(Suppl 20), 22–33.
- Van Brakel, W. H. (2006). Measuring health-related stigma—A literature review. *Psychology, Health and Medicine*, 11, 307–334. http://dx.doi.org/10.1080/13548500600595160
- Vučić-Peitl, M., Peitl, V., & Pavlović, E. (2011). Sexual self-perception in schizophrenic and depressive patients. *Nordic Journal of Psychiatry*, 65, 306–310. http://dx.doi.org/10.3109/08039488.2010.545144
- Wainberg, M. L., Alfredo González, M., McKinnon, K., Elkington, K. S., Pinto, D., Gruber Mann, C., & Mattos, P. E. (2007). Targeted ethnography as a critical step to inform cultural adaptations of HIV prevention interventions for adults with severe mental illness. *Social Science & Medicine*, 65, 296–308. http://dx.doi.org/10.1016/j.socscimed.2007.03 .020
- Wainberg, M. L., McKinnon, K., Mattos, P. E., Pinto, D., Mann, C. G., de Oliveira, C. S., . . . the PRISSMA Project. (2007). A model for adapting evidence-based behavioral interventions to a new culture: HIV prevention for psychiatric patients in Rio de Janeiro, Brazil. AIDS and Behavior, 11, 872–883. http://dx.doi.org/10.1007/s10461-006-9181-8
- Wright, E. R., & Gayman, M. (2005). Sexual networks and HIV risk of people with severe mental illness in institutional and community-based care. AIDS and Behavior, 9, 341–353. http://dx.doi.org/10.1007/s10461-005-9008-z
- Wright, E. R., Wright, D. E., Perry, B. L., & Foote-Ardah, C. E. (2007).Stigma and the sexual isolation of people with serious mental illness.Social Problems, 54, 78–98. http://dx.doi.org/10.1525/sp.2007.54.1.78
- Zumbo, B. D., Gadermann, A. M., & Zeisser, C. (2007). Ordinal versions of coefficients alpha and theta for Likert rating scales. *Journal of Modern Applied Statistical Methods: JMASM*, 6, 21–29.

Received September 17, 2014
Revision received September 28, 2015
Accepted September 29, 2015