It is illegal to post this copyrighted PDF on any website. It Is Hard to Be a Woman With Schizophrenia : Randomized Controlled Trial of a Brief Video Intervention to Reduce Public Stigma in Young Adults

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ABSTRACT

Objective: Women with schizophrenia encounter specific genderrelated stressors that may affect their recovery process. They are more susceptible to victimization and tend to experience more shame and stigma about their illness. Confronting stigma early in the illness could enhance treatment seeking. No studies have examined the efficacy of stigma-reducing interventions focused on public stigma toward women living with schizophrenia or have tested the effect of genderspecific content therein.

Methods: We compared the efficacy at post-intervention and 30-day follow-up of 2 brief (~80-second) videos, with and without gender-related content, and a non-intervention control, in 1,181 young adults, between September and November 2021. The videos feature an empowered young woman living with schizophrenia who describes struggling with her psychotic illness to attain recovery and hope.

Results: A 3×3 group-by-time analysis of variance showed decreased mean stigma scores over time in the two intervention arms relative to controls across all 5 public stigma domains: social distance (F=17.1, P<.001), stereotyping (F=25.0, P<.001), separateness (F=8.3, P<.001), social restriction (F=16.6, P<.001), and perceived recovery (F=7.8, P<.001). Linear mixed modeling showed a greater intervention effect for women in the gender-related video group in social distance, stereotyping, and separateness.

Conclusions: Greater stigma reduction among women in the genderrelated video group underscores the importance of tailoring the narrative to specific experiences related to socio-demographic characteristics, especially among members of marginalized groups. This attenuation may result in greater identification and solidarity with the presenter. Future studies should explore other socially oppressed groups, including Black, Latinx, Asian, and LGBTQ+ communities.

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chizophrenia affects 20 million people worldwide, with similar prevalence rates among men and women.^{1,2} Women tend to have later onset, fewer challenges with social interaction, higher remission rates, better response to typical antipsychotics, and fewer hospitalization days than men.³ Despite this potentially better prognosis than men, women encounter specific gender-related stressors that may affect their recovery process. For example, a recent review by Seeman⁴ suggests that women may receive higher-than-standard doses of antipsychotics and therefore experience more side effects. Some women report discouragement from providers about having children and not receiving appropriate support during pregnancy.⁴⁻⁶ Qualitative studies also suggest that women with schizophrenia are more susceptible to victimization and high rates of unemployment despite having some postsecondary education.6,7

Public Stigma

Stigma, described by Goffman as a "situation of the individual who is disqualified from full social acceptance,"8 prominently affects the lives of women living with schizophrenia, causing them to experience loneliness and fear.⁶⁻⁸ Public stigma stems from negative beliefs and attitudes that cause the general population to fear, avoid, and reject individuals who have schizophrenia.9 Individuals with schizophrenia expect to face prejudice and discrimination (anticipated stigma) and internalize public stereotypes of people with schizophrenia (self-stigma).¹⁰⁻¹² Public, anticipated, and self-stigma decrease treatment seeking and create barriers to pursuing independent living.^{13,14} Studies show that women with schizophrenia experience greater illness-related shame than men, leading them to frequently hide their diagnosis,¹⁵ and that authorities often question their reports of victimization.¹⁶ In addition, women living with schizophrenia report experiencing paternalism and sexism.¹⁷ These findings accord with Oexle and Corrigan's theory¹⁸ that the stigma experienced by individuals who have a mental illness is impacted by their intersectionality, including membership in marginalized groups such as gender. There is a need for interventions to reduce public stigma toward schizophrenia that focus on women.⁹ We know of no such gender-specific interventions targeting stigma reduction for women with schizophrenia.

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Clinical Points

- Women have a different experience of public stigma in regard to schizophrenia than men, and antistigma interventions should be adjusted accordingly.
- Brief videos are effective in reducing public stigma toward people with schizophrenia.
- Addressing gender-related experiences in antistigma campaigns may help reduce public stigma about schizophrenia among women.

Antistigma Interventions

Prior research has suggested that social-contact-based interventions, which involve interpersonal contact with individuals from a stigmatized group who share their struggles and process of recovery, are most effective in reducing stigma.¹⁹⁻²¹ These interventions likely work though the mechanism of moderately disconfirming stereotypes: presenting symptoms and struggles along with themes of hope.²² An example of contact with little or no disconfirmation would be someone who exhibits florid psychosis symptoms and acts in an aggressive manner. In contrast, overtly disconfirming videos are focused on the person's accomplishments and may deemphasize symptoms or a diagnosis. Recent research has suggested that videobased interventions have similar effectiveness as in-person interventions; however, most studies have focused on nonrepresentative college student populations and lack mid- to long-term follow-up.^{23,24}

To address these gaps, we have conducted several studies that demonstrate the efficacy of brief social contact-based video interventions in reducing public stigma toward young individuals living with schizophrenia immediately postintervention and at 30-day follow-up.^{25,26} In a secondary item-level analysis to test gender concordance between presenter and participant, we examined the effect on women vs men of a video featuring a female presenter and found greater stigma reduction in the women than the men in the video group only.²⁶ Another study²⁷ examined whether concordance of presenters' and viewers' gender and race/ ethnicity led to greater stigma reduction and found similar effects across intervention videos regardless of gender or race/ethnicity matching. We hypothesized that the videos did not differ in outcome because they did not mention the impact of the presenter's identity characteristics in the narrative (ie, the video with a female presenter did not include specific references to her experiences of being a woman with psychosis).

Our studies focus on young adults (ages 18–30 years) for several reasons. First, young adults are very concerned about how their peers view them, and we want to intervene before attitudes became engrained.²⁸ Second, our brief, online videos seem a better fit for this age range, considering their high use of social media platforms. Third, youth are especially sensitive to stigma because of their stage of identity consolidation, characterized by a powerful need mental health challenges and disorders, including psychosis, start during young adulthood, and thus this period includes the potential peer group of individuals with psychosis, who may hold stigmatizing attitudes toward individuals with these conditions.

The current study addresses this research gap by testing a brief-video-based intervention of a young woman living with schizophrenia who makes specific references in the video to her gender identity and how this affects her illness and treatment experience. We designed a randomized controlled trial with assessments at baseline, post-brief intervention, and 30-day follow-up. Young (18- to 30-year-old) participants were randomly assigned to (a) a brief-video-based intervention of a female protagonist, with no mention of gender-specific experiences ("video"), (b) a brief gender-related video of the same protagonist, now discussing gender experiences ("gender-related video"), or (c) a non-intervention control condition ("control"). We hypothesized that (1) we would replicate greater, sustainable stigma reduction in the video intervention groups and (2) women would show greater stigma reduction than men only in the gender-related video group.

METHODS

Participants and Recruitment Procedure

Between September and November 2021, we recruited participants from the general public using Prolific, a crowdsourcing platform frequently used in medical and psychology research³⁰ with evidence of validity across studies. Prolific ensures respondent consistency in sociodemographic responses over time, blocks respondents who use tools to hide their location, runs checks to identify bots, and creates anonymous unique respondent IDs.³¹ To further verify validity and accuracy of results, we excluded respondents who answered the questionnaire more than once and added a timer to ensure that participants read the instructions (5-second minimum) and viewed the video (70 seconds) before the "next" button appeared. We also excluded participants who failed our attention-testing questions (eg, "In the following question, please choose the third answer"). We included only English-speaking, 18- to 30-year-old US residents who did not participate in our previous studies. Participants were compensated \$1.10 for each study step, for a total compensation of \$2.20. The New York State Psychiatric Institute Institutional Review Board approved the project. Before initiating the study, participants reviewed an informed consent form. Those agreeing to participate were directed to complete the study procedures via Qualtrics.com, a secure, online datacollection tool.

Intervention

We compared the efficacy of 2 brief videos, 76 and 82 seconds long, and a non-intervention control. The videos presented an empowered young non-Hispanic White

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It is illegal to post this co woman, in her midtwenties, living with schizophrenia.

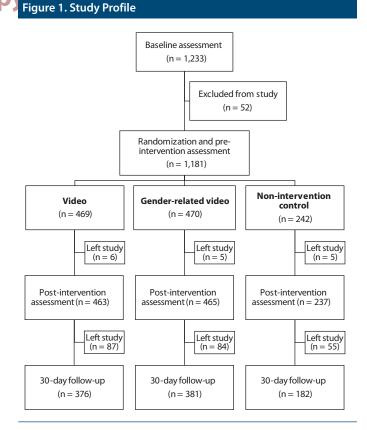
She described the struggles associated with her psychotic illness and raised the themes of recovery and hope ("Every day I experience visual and auditory hallucinations; I know how to deal with them now and I know how to cope"). One video ("video"), used in our previous study, did not explicitly mention gender. The second video ("gender-related video"), designed for this study, presented the same empowered young woman, now describing her experiences with schizophrenia from a gendered perspective. She described people's reactions to her diagnosis: "People are usually surprised that I am a woman experiencing psychosis," and how she was misdiagnosed as a teenager and sent for substance use treatment despite reporting no substance use. She then concludes: "It is very hard to live with schizophrenia, but I believe it's harder to live as a woman with schizophrenia."

Instruments

As in prior studies,^{25–27} we measured and analyzed public stigma separately across 5 domains with good reliability and validity. The 6 social distance items, derived from Boyd et al,³² assessed 6 casual and intimate types of social distance (eg, "Would you be willing to be close friends/a neighbor with a person with schizophrenia?"). The 6 items had good internal consistency in this sample (Cronbach α = .93). Four items from the General Social Survey (https://gss.norc.org) tested stereotyping, assessing the perception whether a person with schizophrenia is able to make treatment and financial decisions and their likelihood for violence ($\alpha = .74$). Four items selected from Phelan³³ measured separateness (or "differentness"): for example, "Someone with arthritis or a broken leg has just one thing wrong with them, but a person with schizophrenia is very different from other people" ($\alpha = .85$). Three social restriction items assessed the perception whether a person living with schizophrenia should marry, have children, or babysit small children ($\alpha = .70$).³⁴ We adapted 2 items from the 41-item Recovery Assessment Scale³⁵ to measure public perception of recovery. The first item assessed perceived recovery from a community member's perspective; the second item, whether a person with schizophrenia is able to meet current personal goals and have a plan for staying well. Responses range from 1 ("strongly agree") to 4 ("strongly disagree"); α for this study was 0.75, similar to our previous studies. Two items assessed whether the respondent had a family member or friend living with serious mental illness (no/yes/prefer not to answer) and, if so, their level of intimacy with that person (very intimate/close, somewhat intimate/close, not intimate/ close, prefer not to answer).³⁶

Analysis

Data were analyzed using SPSS version 28.0. The main outcome measures were reduction in mean public stigma scores across each of the 5 domains:



social distance, stereotyping, separateness, social restriction, and perceived recovery. We based sample size calculation and 2:2:1 randomization to one of the 3 study arms on our previous studies.^{25–27} Pearson χ^2 and 1-way analysis of variance (ANOVA) were used to compare demographic characteristics across groups. Repeated-measures ANOVA compared the mean stigma score as the sum of each stigma domain across the 3 groups and 3 time points. When between-group differences were found, post hoc tests were used to compare each group pair. Next, we used 1-way ANOVA to compare changes across groups between baseline and post-intervention and between baseline and 30-day follow-up. We then used a linear mixed model to test gender differences between time points within study groups to compare female and male changes.

RESULTS

Sample Characteristics

After we excluded 52 (4%) participants who failed validity tests, 1,181 individuals completed the pre-intervention assessment. Of these, 1,165 (99%) completed a post-intervention assessment and 939 (80%) completed a 30-day follow-up assessment (Figure 1). Sociodemographic characteristics did not differ across study arms, nor did baseline characteristics between completers and non-completers (Table 1). Mean participant age was 24.0 ± 3.6 years (range, 18–30). Almost half of participants were female (n = 566, 48%). Fourteen percent (n = 169) of participants self-identified as Hispanic, 85 (7%) as non-Hispanic Black, 742 (63%) as non-Hispanic White, 145

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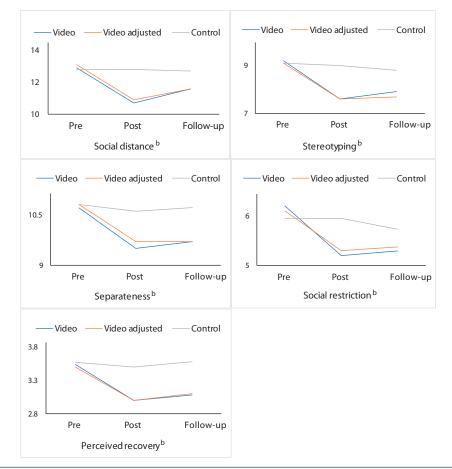
Table 1. Demographic Characteristics of Study Participants

	Video (n=469)		related video (n=470)		Control (n=242)		Total (n=1,181)			
Characteristic									Statistic ^a	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	ANOVA	Р
Age, y	23.9	3.6	24.0	3.6	24.1	3.4	24.0	3.6	0.18	.839
	n	%	n	%	n	%	n	%	X ²	Р
Female gender Race and ethnicity	227	48	225	48	114	47	566	48	0.73 8.98	.994 .533
Hispanic	71	15	65	14	33	14	169	14		
Non-Hispanic Black	30	6	39	8	16	7	85	7		
Non-Hispanic White	284	61	297	63	161	67	742	63		
Non-Hispanic Asian	68	14	55	12	22	9	145	12		
Non-Hispanic Native American	2	0	2	0	0	0	4	0		
Non-Hispanic Other	14	3	12	3	10	4	36	3		
Education									10.6	.560
Never completed high school	4	1	4	1	4	2	12	1		
High school graduate	76	16	63	13	41	17	180	15		
Some college credit	178	38	188	40	88	36	454	39		
Bachelor's degree	174	37	163	35	87	36	424	36		
Master's degree	27	6	43	9	17	7	87	7		
Doctorate degree	6	1	7	2	5	2	18	2		
Familiarity with a person with SMI	223	48	252	54	119	49	594	50	4.14	.387

^aOne-way ANOVA or Pearson χ^2 .

Abbreviations: ANOVA = analysis of variance, SMI = serious mental illness.

Figure 2. Mean Scores on Stigma Domains Across Video (n = 469), Gender-Related Video (n = 470), and No-Intervention Control (n = 242) Groups^a



^a"Follow-up"=30-day follow-up; higher scores indicate greater stigma—social distance: range, 6–24; stereotyping: range, 4–16; separateness: range, 4–16; social restriction: range, 3–12; perceived recovery: range, 2–8.
^bOne-way analysis of variance: *F* ranged from 19.8 to 89.3 for baseline–post changes, and 8.3 to 26.6 for baseline–follow-up changes; *P* < .001 for all changes across stigma domains; Cohen *d* effect sizes ranged from 0.43 to 0.85 for baseline–post changes and 0.33 to 0.74 for baseline–follow-up changes.

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Table 2. Comparison of Changes in Total Mean Scores Across Study Arms^a Difference in mean scores Gender-related Video video Control (n = 469)(n = 470)(n = 242)One-way Mean 95% CI 95% CI 95% CI ANOVA F Stigma domain Mean Mean 0 to 0.1 78.5*** Social distance 1.9 to 2.5 2.1 1.9 to 2.4 Baseline-post 2.2 0.1 17.0*** Baseline-follow-up 1.0 to 1.7 0 -0.4 to 0.4 1.6 1.3 to 1.8 1.4 Baseline-post 1.5 0 89.3*** 1.5 to 1.8 1.4 to 1.7 -0.1 to 0.1 Stereotyping 1.6 Baseline-follow-up 1.2 to 1.5 0.3 0 to 0.5 26.6*** 1.4 1.2 to 1.6 1.4 Separateness Baseline-post 1.2 1.0 to 1.3 1.0 0.8 to 1.2 0.2 0 to 0.3 24.0*** 8.3*** Baseline-follow-up 0.8 to 1.3 1.0 0.7 to 1.2 1.1 0.3 0 to 0.6 51.3*** Social restriction Baseline-post 1.0 0.9 to 1.2 0.8 0.6 to 0.9 0 -0.1 to 0.1 15.9*** Baseline-follow-up 0.9 0.7 to 1.1 0.7 0.6 to 0.9 0.1 -0.1 to 0.3 Baseline-post 0.5 0.5 0.4 to 0.6 0 to 0.2 19.8*** Perceived recovery 0.4 to 0.6 0.1

0.3 to 0.6 ^aHigher scores indicate greater stigma—social distance: range, 6–24; stereotyping: range, 4–16; separateness: range, 4–16; social restriction: range, 3–12; perceived recovery: range, 2–8.

0.4

0.3 to 0.5

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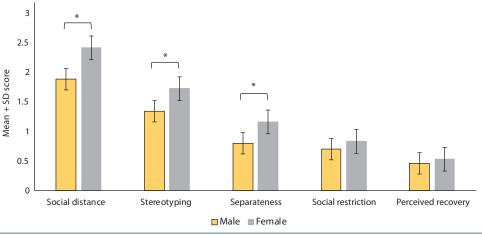
0.5

***P<.001

Abbreviation: ANOVA = analysis of variance.

Baseline-follow-up





^aHigher scores indicate greater stigma—social distance: range, 6–24; stereotyping: range, 4–16; separateness: range, 4–16; social restriction; range, 3–12; perceived recovery; range, 2–8. *Linear mixed models: P < .05.

(12%) as non-Hispanic Asian, 4 (0%) as non-Hispanic Native American, and 36 (3%) as non-Hispanic other.

Intervention Effects

Study arms significantly differed in outcomes. A 3×3 group-by-time ANOVA showed mean stigma scores that decreased over time in the 2 intervention arms relative to controls across all 5 public stigma domains: social distance (F = 17.1, P < .001), stereotyping (F = 25.0, P < .001), separateness (F = 8.3, P < .001), social restriction (F = 16.6, P < .001), and perceived recovery (F = 7.8, P < .001). Figure 2 presents the mean score curves of the study arms over time for each stigma domain, showing that the control arm was essentially unchanged, in contrast to both intervention arms. One-way ANOVAs showed significant betweengroup changes between intervention videos and control from baseline to post-intervention and again from baseline to 30-day follow-up across all 5 stigma domains (Table 2).

Cohen d effect sizes ranged from 0.43 to 0.85 for baseline to post-intervention changes and 0.33 to 0.74 for baseline to 30-day follow-up changes.

To better understand the gender effect, we compared changes in stigma scores from baseline to post-intervention and baseline to 30-day follow-up between women and men across study groups. We found no gender differences in the video and control groups between baseline and postintervention. However, linear mixed modeling showed a significant difference between men and women participants for the gender-related video group in social distance (baseline-to-post changes in men: 1.9 [2.5] vs 2.4 [2.5] in women; F = 4.9 P = .027), stereotyping (men: 1.3 [1.7] vs 1.7 [1.6] in women; F = 5.2, P = .023), and separateness (men: 0.8) [1.6] vs 1.2 [2.0] in women; F = 4.3, P = .038) (Figure 3). We did not find a difference in the social restriction or perceived recovery domains, nor a gender difference between baseline and 30-day follow-up across any domain.

Amsalem et al **It is illegal to post this copyrighted PDF on any website**. **Discussion** differences for the social restriction and perceived recovery

Our randomized controlled trial (RCT) tested the efficacy of 2 brief social contact-based video interventions in reducing public stigma toward women who live with schizophrenia among 1,181 young adults. In 76- to 82-second videos, a young female presenter with lived experience of schizophrenia described her symptoms, personal struggles, and recovery journey, with or without mentioning genderrelated experiences. As hypothesized, both video-based interventions had significantly greater impact than the non-intervention control condition in reducing public stigma across all domains at post-intervention and 30-day follow-up assessments. This outcome replicates our previous findings²⁵⁻²⁷ and corroborates research^{10,19-21} on social contact-based interventions to reduce stigma. These simple, easy-to-disseminate online brief interventions improved stigmatized views and provide an opportunity to explore proactive methods to leverage their usage into social media platforms.

Although there were no gender differences in the generic video and control conditions, we found that women showed a greater decrease in stigma than men on social distance, stereotyping, and separateness subscales in the genderrelated video group. This finding suggests that shared characteristics such as age and gender provide participants with the opportunity to identify with the video protagonist and virtually come in contact. The inclusion of genderrelated experiences may intensify the identification process and underscores the equal status. Chan et al³⁷ showed gender differences in public stigma toward psychosis and recommended tailoring interventions to audience gender. Wong et al³⁸ demonstrated the efficacy of a contact-based educational program to reduce mental illness stigma and found that women showed greater pre-post changes in stigma; however, they did not directly study the effect of matching presenter and participant gender. To our knowledge, our study is the first to tailor a social contactbased intervention to gender.

Scholars such as Oexle and Corrigan¹⁸ emphasize the need for social contact-based interventions to effectively address the implications of intersectionality among people with mental illness. Intersectionality refers to the meaning and consequences of membership in multiple social groups. A woman with mental illness may experience distinct disadvantages compared with a man with mental illness or a woman without mental illness, as the combination of gender and mental illness likely creates a different experience. Our video demonstrated greater effect among women, strengthening this hypothesis. Future studies should explore the efficacy of social contact-based interventions tailored to other socially oppressed groups, such as Black, Latinx, Asian, LGBTQ+, and other marginalized communities, and test whether addressing these different levels of intersectionality intensifies the intervention effect.

While finding gender differences for the social distance, stereotyping, and separateness domains, we did not find such subscales, nor a 30-day follow-up effect across any subscales. A plausible explanation may involve the number of items in each stigma domain. The social restriction (3 items) and perceived recovery (2 items) subscales have lower range and total score than social distance (6 items), stereotyping (4 items), and separateness (4 items), limiting the possibility of achieving statistical significance. Alternatively, these 2 domains of social restriction and perceived recovery could be more resistant to change among women observers. Regarding the lack of longer-term effect, the lower number of participants on day 30 may affect the chances of finding statistically significant differences. It is also not clear how long the effect of a brief video can last. These preliminary findings deserve further exploration and replication, emphasizing learning about women's experiences of mental illness stigma.

Limitations

This RCT has several limitations. Findings are limited to Prolific participants, who might not fully represent the young adult general population, thus limiting generalizability. The ethnoracial breakdown of participants in our study is slightly different from that of the US census population: 12% non-Hispanic Asian in our sample vs 5% in US census, 7% vs 12% non-Hispanic Black, 14% vs 16% Hispanic, and 63% vs 64% non-Hispanic White. Our study videos included only a single White woman in her mid-twenties, limiting the ability to test the influence of other genders, ages, races, and ethnicities of multiple video intervention protagonists on stigma reduction. Moreover, we only assessed attitudes, measures that may be subject to social desirability.³⁹ Future studies should assess implicit stigma-related attitudes and/or behaviors. Lastly, as our study evaluated only immediate post-intervention and 30-day effects, further research should examine longer-term sustainability and whether booster videos would enhance the durability of the antistigma effect.

CONCLUSIONS

This RCT replicated and enhanced our previous findings, showing a beneficial effect of stigma reduction among women in the gender-related video condition. Addressing intersectionality further reduced stigma among women. This underscores the importance of tailoring the narrative to specific experiences related to socio-demographics and other characteristics, especially among members of marginalized groups who are more attuned to prejudice and discrimination and therefore may place greater value on identification and solidarity. Future studies should explore other socially oppressed groups such as Black, Latinx, Asian, or LGBTQ+ communities.

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Video Intervention to Reduce Stigma: Gender Effects

Role of the sponsor: The sponsor had no further role in study design; in the collection, analysis, and interpretation of data; in the writing of the report; and in the decision to submit the paper for publication.

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Additional information: The data that support the findings of this study are available on request from the corresponding author. The video interventions are available at https://www.youtube. com/watch?v=RiuiVwPZ15U and https://youtu.be/ zrFziK8jc6A.

REFERENCES

- James SL, Abate D, Abate KH, et al; GBD 2017 Disease and Injury Incidence and Prevalence Collaborators. Global, regional, and national incidence, prevalence, and years lived with disability for 354 diseases and injuries for 195 countries and territories, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017. Lancet. 2018;392(10159):1789–1858.
- McGrath J, Saha S, Chant D, et al. Schizophrenia: a concise overview of incidence, prevalence, and mortality. *Epidemiol Rev.* 2008;30(1):67–76.
- Ochoa S, Usall J, Cobo J, et al. Gender differences in schizophrenia and first-episode psychosis: a comprehensive literature review. Schizophr Res Treatment. 2012;2012:916198.
- Seeman MV. Women and schizophrenia: new findings. *Neuropsychiatry (London)*. 2013;3(4):423–431.
- Jeffery D, Clement S, Corker E, et al. Discrimination in relation to parenthood reported by community psychiatric service users in the UK: a framework analysis. BMC Psychiatry. 2013;13(1):120.
- Chernomas WM, Clarke DE, Chisholm FA. Perspectives of women living with schizophrenia. *Psychiatr Serv*. 2000;51(12):1517–1521.
- Manuel JI, Hinterland K, Conover S, et al. "I hope I can make it out there": perceptions of women with severe mental illness on the transition from hospital to community. *Community Ment Health J.* 2012;48(3):302–308.
- 8. Goffman E. Stigma: Notes on the Management of Spoiled Identity. Simon and Schuster; 2009.
- Parcesepe AM, Cabassa LJ. Public stigma of mental illness in the United States: a systematic literature review. Adm Policy Ment Health. 2013;40(5):384–399.
- Thornicroft G, Brohan E, Rose D, et al; INDIGO Study Group. Global pattern of experienced and anticipated discrimination against people with schizophrenia: a cross-sectional survey. *Lancet*. 2009;373(9661):408–415.
- Corrigan PW, Watson AC. The paradox of selfstigma and mental illness. *Clin Psychol Sci Pract*. 2002;9(1):35–53.
- 12. Fox AB, Earnshaw VA, Taverna EC, et al.

Conceptualizing and measuring mental illness stigma: The mental illness stigma framework and critical review of measures. *Stigma Health*. 2018;3(4):348–376.

- Henderson C, Evans-Lacko S, Thornicroft G. Mental illness stigma, help seeking, and public health programs. Am J Public Health. 2013;103(5):777–780.
- Angermeyer MC, van der Auwera S, Carta MG, et al. Public attitudes towards psychiatry and psychiatric treatment at the beginning of the 21st century: a systematic review and metaanalysis of population surveys. *World Psychiatry*. 2017;16(1):50–61.
- 15. Borba CPC, Depadilla L, Druss BG, et al. A day in the life of women with a serious mental illness: a qualitative investigation. *Womens Health Issues*. 2011;21(4):286–292.
- Rice E. The invisibility of violence against women diagnosed with schizophrenia: a synthesis of perspectives. ANS Adv Nurs Sci. 2008;31(2):E9–E21.
- Firmin RL, Zalzala AB, Hamm JA, et al. How psychosis interrupts the lives of women and men differently: a qualitative comparison. *Psychol Psychother*. 2021;94(3):704–720.
- Oexle N, Corrigan PW. Understanding mental illness stigma toward persons with multiple stigmatized conditions: implications of intersectionality theory. *Psychiatr Serv.* 2018;69(5):587–589.
- Corrigan PW, Michaels PJ, Vega E, et al. Key ingredients to contact-based stigma change: a cross-validation. *Psychiatr Rehabil J.* 2014;37(1):62–64.
- Thornicroft G, Mehta N, Clement S, et al. Evidence for effective interventions to reduce mental-health-related stigma and discrimination. *Lancet*. 2016;387(10023):1123–1132.
- Mehta N, Clement S, Marcus E, et al. Evidence for effective interventions to reduce mental health-related stigma and discrimination in the medium and long term: systematic review. Br J Psychiatry. 2015;207(5):377–384.
- Reinke RR, Corrigan PW, Leonhard C, et al. Examining two aspects of contact on the stigma of mental illness. J Soc Clin Psychol. 2004;23(3):377–389.
- Corrigan P, Michaels PJ, Morris S. Do the effects of antistigma programs persist over time? findings from a meta-analysis. *Psychiatr Serv*. 2015;66(5):543–546.
- Janoušková M, Tušková E, Weissová A, et al. Can video interventions be used to effectively destigmatize mental illness among young people? a systematic review. *Eur Psychiatry*. 2017;41(1):1–9.
- Amsalem D, Markowitz JC, Jankowski SE, et al. Sustained effect of a brief video in reducing public stigma toward individuals with psychosis: a randomized controlled trial of young adults. *Am J Psychiatry*. 2021;178(7):635–642.
- Amsalem D, Yang LH, Jankowski S, et al. Reducing stigma toward individuals with schizophrenia using a brief video: a

randomized controlled trial of young adults. Schizophr Bull. 2021;47(1):7–14.

- Amsalem D, Valeri L, Jankowski SE, et al. Reducing public stigma toward individuals with psychosis across race and gender: A randomized controlled trial of young adults. *Schizophr Res.* 2022;243:195–202.
- Hopmeyer A, Medovoy T. Emerging adults' self-identified peer crowd affiliations, risk behavior, and social–emotional adjustment in college. *Emerg Adulthood*. 2017;5(2):143–148.
- Moses T. Self-labeling and its effects among adolescents diagnosed with mental disorders. Soc Sci Med. 2009;68(3):570–578.
- 30. Peer E, Brandimarte L, Samat S, et al. Beyond the Turk: alternative platforms for crowdsourcing behavioral research. *J Exp Soc Psychol*. 2017;70:153–163.
- Palan S, Schitter C. Prolific.ac—a subject pool for online experiments. J Behav Exp Finance. 2018;17:22–27.
- Boyd JE, Katz EP, Link BG, et al. The relationship of multiple aspects of stigma and personal contact with someone hospitalized for mental illness, in a nationally representative sample. Soc Psychiatry Psychiatr Epidemiol. 2010;45(11):1063–1070.
- Phelan JC. Geneticization of deviant behavior and consequences for stigma: the case of mental illness. J Health Soc Behav. 2005;46(4):307–322.
- Pescosolido BA, Monahan J, Link BG, et al. The public's view of the competence, dangerousness, and need for legal coercion of persons with mental health problems. *Am J Public Health*. 1999;89(9):1339–1345.
- Corrigan PW, Salzer M, Ralph RO, et al. Examining the factor structure of the Recovery Assessment Scale. Schizophr Bull. 2004;30(4):1035–1041.
- Covarrubias I, Han M. Mental health stigma about serious mental illness among MSW students: social contact and attitude. Soc Work. 2011;56(4):317–325.
- Chan SKW, Lee KW, Hui CLM, et al. Gender effect on public stigma changes towards psychosis in the Hong Kong Chinese population: a comparison between population surveys of 2009 and 2014. Soc Psychiatry Psychiatr Epidemiol. 2017;52(3):259–267.
- Wong EC, Collins RL, Cerully JL, et al. Effects of contact-based mental illness stigma reduction programs: age, gender, and Asian, Latino, and White American differences. Soc Psychiatry Psychiatr Epidemiol. 2018;53(3):299–308.
- Perinelli E, Gremigni P. Use of social desirability scales in clinical psychology: a systematic review. J Clin Psychol. 2016;72(6):534–551.

Editor's Note: We encourage authors to submit papers for consideration as a part of our Focus on Women's Mental Health section. Please contact Marlene P. Freeman, MD, at mfreeman@psychiatrist.com.