## It is illegal to post this copyrighted PDF on any website. Developing Mental Illness Stigma–Reducing Interventions: Why Are the Post-Intervention Assessment Period and Behavior Change Significant?

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n their article in this issue of JCP, Amsalem and colleagues show the salience of a gendered perspective in mental illness stigma reduction video-based narratives among a cohort of young adults, ages 18-30 years (n = 1,181).<sup>1</sup> The authors presented 76- to 82-second video narratives of a woman living with schizophrenia and used a  $3 \times 3$ group-by-time analysis of variance that also included a nonintervention control arm. Of the 3 arms, the video that gave salience to gender showed greater stigma reduction outcomes among women compared to men. The authors showed decreased mean stigma scores for the two intervention arms compared to the control arm across 5 domains (social distance, stereotyping, separateness, social restriction, and perceived recovery). Their follow-up assessment was limited to a 30-day period. The authors highlight the lack of mid- to long-term follow-up in current mental illness stigma research; however, their study does not address this gap. Despite this ongoing gap in longitudinal studies on antistigma interventions in the current literature, Amsalem and colleagues' timely study does highlight the need for expanding research in mental illness stigma to consider sociodemographic factors, culturally salient factors, and behavior change.

Effective antistigma interventions are based on the concept of closing the social distance (through contact) between people who are seen as having a stigmatized characteristic (such as an illness) and people who have stigma toward that characteristic. In the area of mental health, contact interventions are premised on the proven theory that positive and voluntary contact with people living with mental illness can effectively reduce mental illness stigma.<sup>2</sup> This contact can be in person or through video-based storytelling or narratives of an individual's lived experience with mental illness and path to recovery.

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Video-based narratives provide a scalable intervention that may be used across geography and time.<sup>3–5</sup>

The development of antistigma measures and their validation in mental health began as early as the 1930s.<sup>6</sup> The general concept of stigma (having a label, blemish, negative mark, or tattoo) has ancient roots, and much of the framework we use in mental health stems from the fields of Sociology and Anthropology.<sup>7-9</sup> There has been substantial growth over the past two decades in mental illness stigma research as well as the design of standardized and validated measures to assess mental illness stigma.<sup>6</sup> We have successfully shown stigma reduction (small to medium effect size) in the area of knowledge and attitudes in the short-term period (immediately post-intervention and within 30 days), similar to Amsalem and colleagues' report. However, the literature has significant gaps in assessment of antistigma interventions that are able to show sustained changes in knowledge and attitudes beyond 3-6 months post-intervention.<sup>10,11</sup> Mental illness stigma tends to be experienced as a long-term difficulty, greatly reducing the real world impact (clinical relevance) of short-term transient changes in knowledge and attitudes.<sup>11</sup> Moreover, mental illnesses such as major depressive disorder or schizophrenia tend to have symptoms that persist for weeks to months if untreated. These illnesses often have a lifetime risk of recurrence. Given the persistent nature of stigmatizing beliefs<sup>11</sup> and the recurrence risk associated with mental illness, antistigma interventions will need to have long lasting effects in changing knowledge and attitudes in order to effectively address public health inequities related to mental illness stigma.

Patrick Corrigan, a foremost expert on antistigma interventions, offers best practices to guide the development of these interventions, using a social marketing campaign paradigm.<sup>12</sup> Through collaborations at the National Consortium on Stigma and Empowerment, Corrigan suggests 5 key principles for antistigma interventions: targeted (ie, intervention design considers a specific target population), local (ie, consider the differing needs in an urban vs rural setting), credible (ie, consider sociodemographic factors such as race, ethnicity, gender, or socioeconomic status), continuous (ie, consider the fleeting effect of 1-time contact vs repetitive exposure to antistigma contact interventions), and contact itself (ie, removing the social distance between individuals with stigma and individuals with lived experience of mental illness, using in-person or video-based delivery



**It is illegal to post this copy** methods).<sup>10</sup> In the current literature, the majority of studies do not adopt all 5 principles in the design of their antistigma interventions. For example, Amsalem and colleagues<sup>1</sup> offer a 1-time brief video narrative; further research would be needed to assess the benefit of repetition using their videobased intervention. The concept of repetition is common in nationwide public campaigns to address stigma (eg, HIV stigma and COVID-19 vaccine hesitancy).<sup>13</sup>

The authors' previous paper,<sup>3</sup> which assessed race and gender across brief video narratives, suggested that matching by gender or race did not show a difference in stigma reduction across randomized arms. In their previous paper, they suggested that disconfirming stereotypes may explain the lack of difference in matching by race or gender. The authors propose that the current study showed greater mean stigma reduction for the gender matched arm because the narrator gave salience to their gender. It is possible that the presentation of the narrative in a manner that confirms or disconfirms gender may explain the differences in findings. However, there is a deficit of research on stigma-reducing interventions that give salience to sociodemographic factors and cultural context.<sup>14,15</sup> Hence, caution is needed in generalizing the findings in Amsalem and colleagues' previous and current studies. Their studies highlight the need for additional research that considers, in more depth, the role of an intersectional framework of identity and culture in both the narrator and user of videobased antistigma interventions.<sup>15,16</sup>

Another area that requires attention in the mental illness stigma literature is the assessment of change in behavior.<sup>10,11</sup> Amsalem and colleagues did not assess behavior as an outcome, an area that is critical to the public health and policy impact of antistigma interventions. Behavior change refers to an outcome measure that shows a change in actual use of mental health services (such as adherence to visits with a mental health clinician, psychotherapist, or psychiatrist), rather than stigma change that is based solely on knowledge, subjective willingness, or intent (attitude) toward use of mental health services.<sup>17</sup> Despite the well-accepted impact of stigma on mental health care, interventions to reduce mental illness stigma that lead

to actual behavior remain grossly understudied.<sup>10,14</sup> The absence of effective mechanisms that can lead to change in stigma behavior represents a significant public health gap.<sup>8–10,18,19</sup>

The primary mechanisms through which stigma worsens mental health outcomes include delayed treatment seeking behavior and low utilization of mental health services.<sup>10</sup> There is a need for methodologically strong research to develop scalable interventions to reduce mental illness stigma, change behavior, and increase mental health service use.<sup>10,11</sup> Seminal work in the development of antistigma interventions over the last two decades has emphasized that we need a shift toward conceptualizing and building interventions that are able to reduce the time between onset of symptoms, diagnosis of disease, and engagement in treatment. This need is even greater for underserved communities that face a disproportionate impact of the effects of ongoing health inequities.<sup>20,21</sup>

Designing interventions that can effectively address and potentially reduce stigma is an important endeavor toward closing current public health gaps caused by stigmatization of mental illness, in particular in illnesses such as schizophrenia. While the authors comment on the strengths of brevity, one of the most challenging aspects of stigma reduction is maintaining longitudinal changes in attitudes, knowledge, and behavior post-intervention. Future research is needed to identify target mechanisms and models that can produce long-lasting stigma reduction and increase mental health service engagement.<sup>22</sup>

Given the known limitation acknowledged by the authors (that current stigma-reducing interventions have not been shown to change behavior), the article does not provide evidence enough to comment on the intervention's effectiveness in increasing service use. Meta-analysis has shown that change in attitudes may not map onto change in self-report behavior and is even more obscure when it relates to change in actual use of mental health services. There is a need for a fully powered randomized controlled trial that takes into account race/ethnicity, gender, medical mistrust, and other intersectional factors in the design and implementation of stigma-reducing interventions.<sup>10,11,23</sup>

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