Anticipated Suicide Stigma, Secrecy, and Suicidality among Suicide Attempt Survivors

LEA MAYER, MSc, NICOLAS RUSCH, MD, LAURA M. FREY, PhD, MICHAEL R. NADORFF, PhD, CHRIS W. DRAPEAU, PhD, LINDSAY SHEEHAN, PhD and NATHALIE OEXLE, PhD

Objective: Suicidal behavior is stigmatized, and suicide attempt survivors often keep their experiences secret. Although secrecy can protect from discrimination, research from related fields suggests that both the experience of stigma and secrecy can contribute to suicidality. Although suicide attempt survivors are at high risk for reattempt, research investigating the link between suicide stigma and suicidality among this group is rare.

Method: A community sample of 159 suicide attempt survivors participated in an online survey in the US. We used multiple linear regression models to test the association between anticipated suicide stigma and current suicidality, as well as a path model to test the mediating effect of secrecy.

Results: After controlling for age, sex, number of lifetime suicide attempts, and time since the most recent suicide attempt, anticipated suicide stigma was significantly associated with increased suicidality. In a controlled path model, this link was partially mediated by increased secrecy.

Conclusion: These results provide initial support that anticipated suicide stigma, and secrecy can contribute to suicidality among suicide attempt survivors. Therefore, programs to support suicide attempt survivors in coping with suicide stigma and secrecy, as well as interventions to reduce harmful aspects of public suicide stigma, could contribute to suicide prevention.

INTRODUCTION

With globally 800,000 suicides per year and many more attempts, suicide prevention is an important public health issue and knowledge about modifiable suicide risk factors is greatly needed (World Health Organisation, 2017). Past research showed that three social groups at high risk for suicidality, namely people with mental illness, suicide attempt survivors, suicide loss survivors, all experience stigma, and initial evidence suggests that stigma can...
contribute to suicidality (Oexle, Ajdacic-Gross et al., 2017; Oexle, Feigelman, & Sheehan, 2018; Oexle, Herrmann et al., 2018). However, research examining the link between suicide stigma and suicidality among suicide attempt survivors is rare.

In general, stigma has its roots in stereotypes, which are public negative beliefs about a certain social group (e.g., “People with mental illness are weak”). Stereotypes can lead to prejudice when people agree with these stereotypes and have a negative emotional reaction (e.g., “Yes, that’s right. All people with mental illness are weak. I do not take them seriously”). Prejudice can result in discrimination such as avoidant or hostile behavior, greatly reducing opportunities for stigmatized individuals with regard to education, employment, housing, and health care (Rüsch, Angermeyer, & Corrigan, 2005). Many people who are affected by such public stigma come to agree with known stereotypes and internalize them (term self-stigma, e.g., “I have a mental illness, so I must be weak”), a process often resulting in reduced self-esteem and social withdrawal (Calear, Batterham, & Christensen, 2014; Lehmann, Hilimire, Yang, Link, & DeVylder, 2016). Stigmatized identities are often concealed to avoid discrimination, but secrecy can also lead to negative cognitive, affective as well as behavioral consequences, such as suspiciousness, anxiety, shame, or social isolation (Pachankis, 2007).

An increasing number of studies provide evidence that stigma contributes to suicidality among persons with mental illness. For instance, qualitative research suggests that among people with mental illness the experience of discrimination can lead to suicidality by contributing to increased loneliness, hopelessness, and secrecy as well as reduced self-worth (Farrelly et al., 2015; Oexle, Herrmann et al., 2018). Two quantitative longitudinal studies among people with mental illness found that more self-stigma and more stigma-related stress predicted suicidality over time (Oexle, Rüsch et al., 2017; Xu et al., 2016). Additionally, both qualitative and quantitative findings suggest that keeping mental illness secret (as a strategy to avoid stigma) can mediate the association between perceived or experienced stigma and suicidality among persons with mental illness (Oexle, Ajdacic-Gross et al., 2017; Oexle, Herrmann et al., 2018).

Another stigmatized social group with increased risk for suicide are people who have survived a suicide attempt (i.e., suicide attempt survivors). Similar to mental illness stigma, suicide stigma consists of stereotypes (e.g., “People who attempt suicide are crazy”), prejudice (e.g., “I am afraid of people who attempted suicide because they are crazy”), and discrimination (e.g., ignoring, mistrust) due to a person’s history of suicidality (Corrigan, Sheehan, & Al-Khouja, 2017). Although suicidal behavior and mental illness often co-occur, research has shown that the stereotypes associated with mental illness and suicide attempt are not entirely equal. Both mental illness and suicidal behavior are seen as a sign of weakness, but suicidal behavior is also stereotyped as selfish, attention-seeking, and immoral (Batterham, Calear, & Christensen, 2013; Pompili, 2007; Sheehan, Corrigan et al., 2017). Also, suicide attempt survivors are perceived as less likely to recover compared to people with mental illness (Sheehan, Dubke, & Corrigan, 2017). Based on suicide stigma, many suicide attempt survivors experience discrimination in terms of distancing or ignoring, as well as mistrust and shaming (Calear et al., 2014; Lehmann et al., 2016; Rimkeviciene, Hawgood, O’Gorman, & Leo, 2015; Sheehan, Corrigan et al., 2017). Due to suicide stigma, suicidality (current and past) is often concealed, which hinders suicide prevention (Fulginiti, Pahwa, Frey, Rice, & Brekke, 2016; Oexle, Herrmann et al., 2018; Rimkeviciene et al., 2015).

Although past research provides strong evidence for a link between mental illness stigma and suicidality among people with mental illness, the association between suicide stigma and suicidality among suicide attempt survivors is less clear, despite increased suicide risk among this group. A recent qualitative study among suicide attempt survivors suggests that suicide stigma
might contribute to feelings of burdensomeness, a well-known contributor to suicidality (Rimkeviciene et al., 2015). In another recent qualitative study, suicide attempt survivors reported that suicide stigma led them to conceal their experiences with suicidality, seek less help, and feel more hopeless (Oexle, Herrmann et al., 2018). Those results suggest that suicide stigma could indeed contribute to suicidality among suicide attempt survivors, but quantitative evidence is lacking.

Building on previous findings, we investigated the link between anticipated suicide stigma and current suicidality among a community sample of suicide attempt survivors. We hypothesized that anticipated suicide stigma is positively associated with current suicidality. Additionally, as secrecy is a common strategy to avoid stigma but can have negative consequences, we expected secrecy about one’s suicide attempt(s) to be a mediator in the association between anticipated suicide stigma and current suicidality.

MATERIALS AND METHODS

Procedure

An online study was conducted between October 2017 and June 2018 among adults who had survived at least one suicide attempt. Potential participants were recruited through email invitations to the Suicidology listservs and to attempt survivors interviewed for the Live Through This Project (www.livethroughthis.org). The study invitation was also posted on the American Foundation for Suicide Prevention’s Web site. Inclusion criteria were being 18 years or older and self-identification as a suicide attempt survivor. Information emails and online posts included the link to the online survey that was conducted within Qualtrics. Individuals who opened the survey were informed about the aims of the study, and informed consent was collected by asking them to click a button (“I agree”) indicating their agreement to participate. Multiple participation was prevented by using the Prevent Ballot Box Stuffing Option within Qualtrics. There was no reimbursement for participation. The Institutional Review Board of a small Midwestern university approved the study protocol.

Participants

In total, 331 persons provided informed consent and 159 participants completed all relevant questionnaires and were included in the current analysis. Included participants were mostly Caucasian (n = 145, 91%), women (n = 138, 87%) and aged between 18 and 68 years (M = 35.99, SD = 12.69). About half had never been married (n = 74, 47%) and were employed at the time of participation (n = 82, 52%). Two-thirds of respondents had survived more than one suicide attempt (n = 107, 67%), and the time since the most recent suicide attempt ranged from 0 to 48 years (M = 7.79, SD = 9.93).

Measures

The Suicidality Attributes Scale (SIDAS) is a brief, valid, and reliable scale to measure the severity of suicidality over the past month (van Spijker et al., 2014). It consists of five items about the frequency and controllability of suicidality (item 1 and 2), closeness to an attempt (item 3), as well as distress and interference with daily activities due to suicidal thoughts (item 4 and 5). Items are rated on a 11-point Likert scale (0 = never, 10 = always). Total sum scores, with item 2 reverse coded, from 0-50 were calculated with higher scores indicating greater suicidality (Cronbach’s α in this sample = .91).

We adapted the Chronic Illness Anticipated Stigma Scale (CIASS; Earnshaw, Quinn, Kalichman, & Park, 2013) to measure anticipated suicide stigma. The original scale asks respondents to rate the perceived likelihood of 12 negative reactions other people (i.e., family members, co-workers and employers, health care providers) might have due to a respondent’s chronic illness (e.g., “A friend or family member will think that your...
problems are your fault”). For the current study, we asked participants to rate the likelihood of the same negative reactions, but exchanged “chronic illness” with “suicide attempt” in the instructions (“How likely is it that they will treat you in the following ways because of your suicide attempt?”). Participants rated the likelihood of the 12 statements on a Likert scale from 1 (very unlikely) to 5 (very likely). A total mean score from 1 to 5 was calculated with higher scores indicating more anticipated suicide stigma (Cronbach’s α in this sample = .92).

To assess secrecy about a previous suicide attempt, we adapted a well-known and validated 5-item scale assessing secrecy about mental illness (Link, Mirotznik, & Cullen, 1991) by exchanging the term “people with mental illness” with “suicide attempt survivors” in each statement (e.g., “In order to get a job, suicide attempt survivors will have to keep their story secret”). Participants indicated their agreement on a six-point Likert scale (1 = strongly disagree, 6 = strongly agree). Higher scores indicated a greater willingness to conceal a suicide attempt with total mean scores ranging from 1 to 6 (Cronbach’s α in this sample = .75).

Participants provided information about their age, sex, race, employment status, civil status, number of lifetime suicide attempts, and time since most recent suicide attempt as part of a self-developed socio-demographic questionnaire.

**Statistical Analysis**

To compare those with complete data with those with missing data, we used chi-square tests for categorical variables and Mann–Whitney U tests for continuous variables. Nonparametric Mann–Whitney U tests were used for variables that were not normally distributed. Characteristics of the sample were described and bivariate associations between independent variables and suicidality using Pearson’s correlation for continuous variables and point-biserial correlation for categorical variables were calculated (Table 1). Subsequently, linear regression models testing the association between anticipated suicide stigma and suicidality were performed. Due to violations of the assumptions of normal distribution and homoscedasticity, bootstrapped regression models (bootstrap replications: 1000) were used for robust confidence intervals and significance tests. The first model did not include any confounding (i.e., age, sex, number of lifetime suicide attempts, time since most recent suicide attempt) or mediating variables (i.e., secrecy), which were added in steps 2 and 3, respectively (Table 2). Finally, a path analysis was performed to test the mediating effect of secrecy in the association between anticipated suicide stigma and suicidality. All paths were controlled for age, sex, number of lifetime suicide attempts, and time since most recent suicide attempt (Figure 1). Bootstrapping was used as a robust method to estimate significance tests (bootstrap replications: 1000). SPSS version 25 was used for all analyses, except for the path analyses, which was performed within R (package lavaan, version 3.5.1).

**RESULTS**

**Descriptive Analysis**

Those with complete data (n = 159) and those with missing data (n = 172) did not
differ significantly on any variable except time since the most recent suicide attempt, with a significantly shorter time period since the most recent attempt in the group with complete data ($U = 1085.00; p = .044$). Characteristics of participants with complete data included in the analyses as well as bivariate associations between independent variables and suicidality are shown in Table 1. In total, 20 (13%) participants reported no current suicidality indicated by a SIDAS score of 0. We observed medium levels of secrecy as well as anticipated suicide stigma. Suicidality was significantly, positively correlated with anticipated suicide stigma and secrecy as well negatively correlated with age and time since the most recent suicide attempt. Suicidality was not significantly associated with sex and the number of lifetime suicide attempts.

**Linear Regression Analyses**

In a simple linear regression model (step 1 in Table 2), more anticipated suicide stigma was significantly associated with higher suicidality. After inclusion of confounding variables (step 2 in Table 2), the association between anticipated suicide stigma and suicidality ($R^2 = .11$). After inclusion of confounding variables (step 2 in Table 2), the association between anticipated suicide stigma and suicidality ($R^2 = .19$). After inclusion of confounding variables (step 3 in Table 2), the association between anticipated suicide stigma and suicidality ($R^2 = .23$).

![Path model testing the mediation effect of secrecy in the association between anticipated suicide stigma and suicidality (N = 159). Standardized path estimates are shown. All paths were controlled for age, sex, number of lifetime suicide attempts, and time since most recent suicide attempt. *$p < .05$.](image)

**TABLE 2**

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>$B$</th>
<th>95% CI ($B$)</th>
<th>$\beta$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1&lt;sup&gt;a&lt;/sup&gt; Anticipated suicide stigma</td>
<td>4.71</td>
<td>2.90 to 6.49</td>
<td>.34</td>
<td>.001</td>
</tr>
<tr>
<td>Step 2&lt;sup&gt;b&lt;/sup&gt; Anticipated suicide stigma</td>
<td>4.36</td>
<td>2.46 to 6.38</td>
<td>.32</td>
<td>.001</td>
</tr>
<tr>
<td>Sex</td>
<td>-0.29</td>
<td>-5.30 to 6.17</td>
<td>-.01</td>
<td>.905</td>
</tr>
<tr>
<td>Age</td>
<td>-0.09</td>
<td>-.26 to .09</td>
<td>-.09</td>
<td>.288</td>
</tr>
<tr>
<td>Number of lifetime suicide attempts</td>
<td>-2.49</td>
<td>-7.08 to 2.03</td>
<td>-.09</td>
<td>.303</td>
</tr>
<tr>
<td>Time since the most recent suicide attempt</td>
<td>-0.38</td>
<td>-.63 to -.19</td>
<td>-.27</td>
<td>.001</td>
</tr>
<tr>
<td>Step 3&lt;sup&gt;c&lt;/sup&gt; Anticipated suicide stigma</td>
<td>3.22</td>
<td>1.13 to 5.27</td>
<td>.23</td>
<td>.005</td>
</tr>
<tr>
<td>Sex</td>
<td>-0.57</td>
<td>-.85 to 5.88</td>
<td>-.02</td>
<td>.824</td>
</tr>
<tr>
<td>Age</td>
<td>-0.14</td>
<td>-.34 to .04</td>
<td>-.13</td>
<td>.101</td>
</tr>
<tr>
<td>Number of lifetime suicide attempts</td>
<td>-2.67</td>
<td>-6.95 to 1.55</td>
<td>-.09</td>
<td>.248</td>
</tr>
<tr>
<td>Time since the most recent suicide attempt</td>
<td>-0.32</td>
<td>-.52 to -.16</td>
<td>-.23</td>
<td>.001</td>
</tr>
<tr>
<td>Secrecy</td>
<td>2.42</td>
<td>.65 to 4.20</td>
<td>.22</td>
<td>.008</td>
</tr>
</tbody>
</table>
stigma and suicidality remained significant. In step 3 (see Table 2), secrecy was added as an independent variable and the association between suicidality and anticipated suicide stigma was reduced but remained significant.

**Path Analysis**

Finally, we used a path model to test secrecy as a mediator in the association between anticipated suicide stigma and suicidality (see Figure 1). As a saturated model was estimated, model fit was not evaluated. Secrecy partially mediated the association between anticipated suicide stigma and suicidality (indirect effect: \( \beta = .08, p = .024 \); direct effect: \( \beta = .23, p = .003 \)). The model explained 26% of the total variance in suicidality.

**DISCUSSION**

In the current study, more anticipated suicide stigma was associated with increased current suicidality among a community sample of suicide attempt survivors, partially mediated by secrecy about suicide attempt. Our findings are in line with initial qualitative research on the link between suicide stigma and suicidality among suicide attempt survivors (Oexle, Herrmann et al., 2018; Rimkeviciene et al., 2015).

In our study, more anticipated suicide stigma was associated with increased secrecy about suicide attempt which in turn contributed to increased suicidality. In general, secrecy and the threat of a potential discovery of a stigmatized identity (e.g., in situations in which individuals are forced to answer questions related to their stigmatized status) can increase emotional distress and have harmful consequences like social isolation and depression (Pachankis, 2007). Interestingly, emotional distress and impaired connectedness both reflect parts of the Three-Step Theory of Suicide which tries to explain the occurrence and progression of suicidality. Klonsky and May (2015), who developed this theory, assumed that suicidality results from a combination of hopelessness and pain (which includes psychological pain or distress; step 1), with the severity of suicidality depending on the level of social connectedness (step 2). In a third step, suicidality can lead to suicidal behavior when dispositional factors (e.g., pain sensitivity), acquired capability (e.g., experiences with physical abuse), and practical contributors to attempt suicide (e.g., access to means to attempt suicide) exist (Klonsky & May, 2015). In line with our findings, both anticipated suicide stigma and secrecy about suicide attempt could increase distress and impair social connectedness among suicide attempt survivors and therefore contribute to suicidality. However, as the SIDAS measures suicidality in general, the contribution of anticipated suicide stigma and secrecy to suicidal behavior specifically remains unknown.

The current study has several strengths. Although there is an expanding field of research focusing on mental illness stigma and its link with suicidality, to the best of our knowledge there are no previous quantitative findings regarding the link between suicide stigma and suicidality among suicide attempt survivors, which are a hard-to-reach group at increased risk for suicide. Our findings suggest the need for comprehensive research that examines the association between suicide stigma, secrecy, and suicidality among suicide attempt survivors.

Although we mostly used validated continuous scales and controlled for important confounding variables, cross-sectional data were analyzed and causal interpretations are not possible. Anticipated suicide stigma can lead to increased secrecy and suicidality, but the experience of suicidality could also increase anticipated suicide stigma and secrecy about previous suicide attempts. Furthermore, given that suicidality is linked to mental illness in many—yet not all—cases (Stone et al., 2018), many participants included in this study might also have a mental illness. Therefore, the anticipation of mental illness stigma could have contributed to current suicidality among participants in this study as well. The extent to which anticipated suicide stigma and anticipated mental illness stigma interrelate remains unknown.
Finally, associations were analyzed among a nonrepresentative community sample (i.e., the majority of participants were Caucasian and female) which limits the generalizability of results, especially with regard to male suicide attempt survivors from ethnic minority groups.

In conclusion, our findings provide initial evidence for anticipated suicide stigma and resulting secrecy contributing to suicidality among suicide attempt survivors. Programs to support suicide attempt survivors in coping with suicide stigma and secrecy as well as interventions to reduce harmful aspects of suicide stigma within society could contribute to suicide prevention.

REFERENCES


Manuscript Received: May 27, 2019
Revision Accepted: November 13, 2019