

Letter to the Editor

Examination of Anger Expression in Female and Male Suicide Attempt Survivors

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Abstract: Anger can be associated with a lack of mental resources to control impulses, including suicidal behavior risk. We conducted a case-control study on 84 patients with and without suicide attempt at an emergency hospital in Rio Grande do Sul, Brazil. The results highlighted that men who have attempted suicide tend to have higher levels of angry temperament than the men in the control group, and women who attempted suicide, in turn, tend to feel angry easily, especially when they are criticized or receive negative feedback. Therefore, the response to environmental contingencies of patients surveyed, or their internal experiences reveals their difficulty in dealing with acute urges to die by suicide, according to the fluid vulnerability theory.

Keywords: suicide attempt, anger, gender differences

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Anger can be defined as an emotional condition characterized by subjective feelings that vary in intensity and range, from mild annoyance or irritation to intense fury and rage. This state is usually accompanied by muscle tension and stimulation of the neuroendocrine and autonomic systems (Spielberger, 2010). As a trait, anger involves individual differences; there is a wide variety of annoying or frustrating situations, and individuals will respond according to their personality trends. Expressions of anger are associated with a lack of mental resources to control impulses, and can compromise an individual's physical health, including suicidal behavior (Spielberger, 2010). We observed in a

case-control study that gender plays a role in the relationship between suicidal behavior and anger experiences.

A total of 84 patients at an emergency hospital in Rio Grande do Sul, Brazil, participated in this case-control study. The case group (n = 28) included those who were hospitalized for suicide attempt. Data were collected from patients who were hospitalized or were being treated at the emergency room of the Hospital de Pronto Socorro de Porto Alegre, RS between August 20, 2015 and March 21, 2016. In both groups, only patients who were at least 18 years old, who could verbally answer the instruments, and gave written informed consent to participate in the study were included. Those who, despite fulfilling the previously mentioned criteria, were unresponsive when the instruments were applied, presented psychotic symptoms or refused to participate were excluded. To estimate the anger level, we used the State-Trait

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Anger Expression Inventory (STAXI-2; Spielberger, 2010).

A generalized estimating equation model was used to compare the subdomain and area means between groups according to gender. This model was used due to the sample pairing method (1 case for 2 controls of the same gender and age): the most appropriate analysis should consider this trio as a unit. The model was constructed using a gamma distribution with log binding function, an exchangeable working correlation matrix, and a robust estimator covariance matrix.

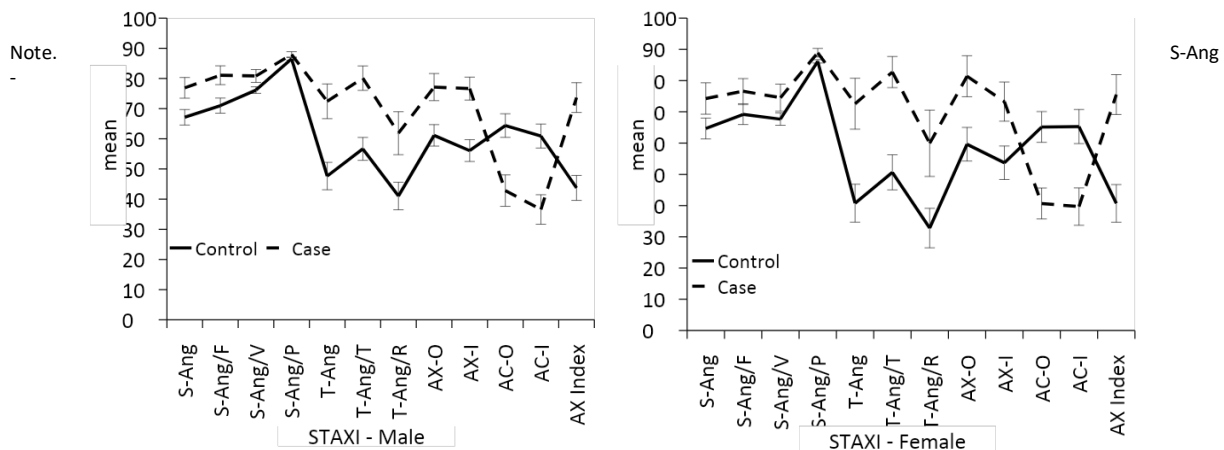
The results highlighted that men who have attempted suicide tend to have higher levels of angry temperament than the men in the control group. They also are more likely to hold in or suppress angry feelings (anger expression-in), but with a low ability for controlling these feelings by calming down or cooling off (anger control-in) themselves. The general expression of anger in men who survived a suicide attempt was also greater than that of the control group. In turn, women who have attempted suicide had higher levels of expressing anger both verbally and physically, as well as of trait-anger, angry temperament, angry reaction, anger expression-out (i.e. expression of anger in an outwardly negative and poorly controlled manner), anger expression-in (i.e. holding things in or suppressing anger when they are angry or furious), and general expression of anger, than women in the control group. Also, they had lower levels of anger control strategies compared to the control group. They showed a low ability to relax and calm down (control-in), as well as low ability to monitor and control the physical or verbal expressions of anger (control-out). Figure 1

shows mean and standard deviation of the variables by group and gender.

The profile of men who attempted suicide, concerning the styles of experiencing anger, is characterized by a trend towards experiencing feelings of anger with little or no provocation, blaming themselves for irritable feelings, and having great difficulty self-regulating and calming down. Women who attempted suicide, in turn, tend to feel angry easily, even for little or no reason and especially when they are criticized or receive negative feedback. They tend to have an irritable personality style, and the way they express anger is by cursing and hitting people. They seem to have a hard time calming down or controlling their outbursts of anger.

The profiles described above can be conceptually fitted into suicide theories such as the interpersonal-psychological theory of suicide (Joiner, 2007) and the fluid vulnerability theory (Rudd, 2006). The profiles may lead to interpersonal conflicts, being the male profile more likely to present a social isolation pattern, while the female profile is more likely to show an antagonistic pattern in addition to internalizing problems. These interpersonal problems based on anger can lead to thwarted belongingness and perceived burdensomeness, the two main components of the interpersonal-psychological theory of suicide (Dillon, Van Voorhees, & Eldogen, 2020). Also, both male and female profiles are characterized by feeling irritated easily and low capacity for anger control. Thus, people with those anger profiles may have difficulty dealing with acute urges to die by suicide when they arise, according to the fluid vulnerability theory.

Figure 1. Area analysis graph (mean and standard deviation).



State-Anger; S-Ang/F - Feeling Angry; S-Ang/V - Feel like Expressing Anger Verbally; S-Ang/P - Feel Like Expressing Anger Physically; T-Ang - Trait-Anger; T-Ang/T - Angry Temperament; T-Ang/R - Angry Reaction; AX-O - Anger Expression-Out; AX-I - Anger Expression-In; AC-O - Anger Control-Out; AC-I - Anger Control-In; AX Index - Anger Expression Index.

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Conflict of interests

No potential conflict of interest was reported by the authors.

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