



Research paper

Aggression, impulsivity, and their predictive value on medical lethality of suicide attempts: A follow-up study on hospitalized patients

Yari Gvion

Bar Ilan University, Psychology Department, Israel



ARTICLE INFO

Keywords:
Suicide
MSSA
Impulsivity
Hopelessness

ABSTRACT

Background: This study examined the role of aggressive-impulsive variants, and suicide history in predicting the medical severity of follow-up suicide attempts.

Methods: 97 consecutive psychiatric in-patients who participated in earlier study 2–5 years previously. Thirty-three had a history of a medically serious suicide attempt (MSSA), 29 had a history of a medically non-serious suicide attempt (MNSSA), and 35 had no history of suicide. Participants completed a battery of instruments measuring aggressive-impulsive variables, hopelessness and communication difficulties. Findings were analyzed in relation to follow-up suicide attempts and their severity.

Results: 32 patients (33%) had attempted suicide: 9 (9.27%) (including one death) MSSA. Of these, 7 patients were MSSAs in the index attempt and 2 were MNSSAs in the index attempt. 23 (23.7%) MNSSA: Of these, 6 were MSSAs in the index attempt; 13, MNSSAs in the index attempt and 4 from the non-suicidal psychiatric group. 65 patients (67%) did not attempt suicide during the period since the index studies. Anger-out, violence impulsivity and hopelessness had significant positive correlations with medical severity of follow-up suicide attempts. Similar correlations were found between anger-out, violence and the amount of follow-up suicide attempts. A hierarchical regression analysis was conducted to determine contribution of study variables to severity of future suicide attempts. Severity of index attempt, hopelessness aggressive-impulsive variants and two interactions (medical severity of index suicide attempt X impulsivity and self-disclosure X anger-in) accounted for 44.7% of the variance of the medical severity of follow-up suicide attempts.

Limitations: (i) Possibly incomplete patient information, as some of the patients who participated in the index studies could not be located. (ii) Relatively small group of patients with an index MSSA.

Conclusions: The major findings of this paper are the predictive value of MSSA vs. MNSSA. The lethality of future suicide attempt is closely linked to the lethality of former suicide attempt, impulsivity and hopelessness. Thus, patients who have made a suicide attempt should be assessed for medical severity of the attempt, impulsive-aggressive measures hopelessness, and communication difficulties, which are important factors in follow-up attempts.

1. Introduction

Annually, 800,000 people worldwide die from suicide (World Health Organization, 2014). The rate of non-lethal attempts far exceeds that of lethal attempts. The need to distinguish between and assess suicide attempters who are high risk for eventual suicide and those who are not is an important task for clinicians. Several studies have found that individuals who make a Medical Serious Suicide Attempt (MSSA) carry risk factors similar to those carried by suicide completers (Beautrais, 2001, 2003; Hawton, 2001). Hence, those who make MSSAs are at higher risk for future completed suicide compared to those who make Medically Non-Serious Suicide Attempts (MNSSA) (Beautrais et al., 2012; Fowler et al., 2012; Levi-Belz et al., 2013, 2014; Marzano

et al., 2010; Rivlin et al., 2010; Tomasula et al., 2012; Trakhtenbrot et al., 2016).

Several studies in suicidal behavior have highlighted the importance of variables associated with aggressive-impulsive traits and states (Baca-Garcia et al., 2005; Gvion and Apter, 2011; Gvion et al., 2014a, 2014b). The link between aggression and the suicide act has been identified in multiple epidemiologic, clinical, retrospective, prospective (Conner et al., 2009) and neurobiological studies (Mann and Currier, 2009). Regarding the association between aggression and severity of the attempt, studies carry some controversy. While Doihara et al. (2008) found higher levels of aggression in MSSA (in comparison to healthy controls), in a previous study, we found that although aggressive variables (e.g., anger-in, anger-out and violence) differentiated

E-mail address: yari@kadi.co.il.

<https://doi.org/10.1016/j.jad.2017.11.033>

Received 16 June 2017; Received in revised form 27 August 2017; Accepted 8 November 2017

Available online 20 November 2017

0165-0327/ © 2017 Elsevier B.V. All rights reserved.

suicide attempters from non-attempters, they did not differentiate high-lethality from low-lethality attempters (Gvion et al., 2014a). This finding was compatible with other studies (Soloff et al., 2005).

Another construct associated both with aggression and suicide is impulsivity. Impulsivity encompasses a broad range of behaviors that reflect impaired self-regulation, evident, for instance, in poor planning, responding prematurely before considering consequences, sensation seeking, risk taking, poor response inhibition and a tendency for immediate reward (Whiteside and Lynam, 2003). While various studies have recognized impulsivity as a major risk factor for suicidal behavior (Gothelf et al., 1999), it is yet unknown whether it increases the risk of suicide independently of aggressive traits (Baud, 2005) or if it mediates the attempt's lethality. Data are diverse. Some studies reported evidence of higher levels of impulsivity in individuals who died by suicide than those who did not (Dumais et al., 2005a, 2005b; Swann et al., 2005). Others found that although people who attempt suicide tend to be more impulsive than those who do not (trait impulsivity), the actual act (state impulsivity) (Baca-Garcia et al., 2005) of completed suicide is often not executed impulsively (Anestis et al., 2007). In our previous study, we found that both trait and state impulsivity were associated with suicidal behavior, but were not related to the lethality of the suicide attempt (Gvion et al., 2014a, 2014b).

Both aggression and impulsivity may be related to other suicide risk factors. Clinical and research experience suggests that people who are in agony and depressed may often be irritable and angry. This raises the likelihood of detaching from family and peers (Werner and Crick, 1999). In addition, openness and self-disclosure of personal information, thoughts, and feelings are considered important for constructing intimate relations and achieving mental and physical health, sense of competence, adaptation. These roles of self-disclosure in different aspects of mental health raise the question whether lower levels of self-disclosure relate to suicidal behaviors. Particularly, studies indicate that individuals who attempted suicide had substantial difficulties in telling others about their suicide attempt. Another study showed that individuals who made a potentially lethal suicidal attempt had lower self-disclosure compared to individuals who attempted a mild act, or those who only had suicidal ideations. This difference was found to still hold even when controlling for depression, hopelessness, and anxiety. In earlier studies, we found that individuals who made MSSAs reported significantly higher levels of communication difficulties (loneliness and low self-disclosure tendencies) compared to individuals who made MNSSAs or had not attempted suicide (Gvion et al., 2014a, 2014b).

Another commonly studied link is that between the experience of hopelessness and suicide attempts. Hopelessness is considered a risk factor for suicide completion (Hawton, 2002) in non-clinical (Kuo et al., 2004) and clinical populations (Soloff et al., 2000). Furthermore, hopelessness was found to be a reliable predictor of completed suicide over ten and twenty years of follow-up (Beck et al., 1989; Brown et al., 2000). Soloff et al. (2000) found in a cohort of Borderline Personality Disorder (BPD) inpatients with and without depression, that hopelessness and impulsive aggression independently increased the risk of suicidal behavior in both BPD and Major Depressive patients.

It is widely known that past suicidal acts are a major risk factor for future suicide acts, even decades later (Christiansen and Jensen, 2007; Coryell and Young, 2005; Hall et al., 1998; Hawton and Fagg, 1988; Mendez-Bustos et al., 2013; Murphy et al., 2012; Pompili et al., 2009; Suominen et al., 2004; Trakhtenbrot et al., 2016; Whitlock et al., 2013). This is compatible with the interpersonal-psychological theory, which suggests that the suicidal individual develops the ability to hurt their selves repeatedly, thereby assimilating habituation to the feelings of pain and fear that accompany suicidal behavior to the point where they can execute a lethal attempt (Joiner et al., 2009). The interpersonal theory posits aggression and impulsivity as indirectly effecting acquired capability as increasing risk for suicidal behavior (Swogger et al., 2014). Is there a connection between the severity of suicidal behavior and a tendency to repeat and aggravate suicidal acts? To study this

linkage, assessment of psychological factors and history of suicide over the long term is necessary to substantiate their contribution to suicidal behavior in general, and particularly MSSA.

In a previous study, we examined the role of mental pain, communication difficulties and suicide history in predicting the medical severity of follow-up suicide attempts (Trakhtenbrot et al., 2016). The aim of the present study was to examine the value of aggressive-impulsive factors as well as the medical severity of past suicide attempts in predicting the medical severity of follow-up attempts. Based on the literature and our previous studies (Gvion et al., 2014a, 2014b; Levi et al., 2008), we formulated two hypotheses: (1) The severity of the index suicide attempt is correlated with the severity of the follow-up suicide attempt. (2) Among suicide attempters, aggressive variables, impulsivity, communication difficulties and hopelessness will be related positively to the lethality of suicide acts. (3) Among suicide attempters, disclosure will moderate the contribution of anger on medical severity: when disclosure is low, anger level will positively correlate to medical lethality of follow up attempt. However, when disclosure is high, no such correlation will be found.

2. Methods

2.1. Participants

The study group was derived from a sample of subjects who had been admitted to a psychiatric unit 2–5 years previously either for a suicide attempt or for psychiatric reasons other than suicide. The subjects were evaluated as part of our previous studies whose results were reported elsewhere (Gvion et al., 2014a, 2014b). Of the 139 patients in the original sample, 97 (69.7%) were located for the present study, 65 men and 32 women. Information regarding the patients was gathered via medical records located at the medical psychiatric health units where the patients were first interviewed after they had previously attempted suicide (index attempt). (p.7). The patients were divided into three subgroups: those initially hospitalized for a MSSA ($n = 33$); those initially hospitalized for a MNSSA ($n = 29$); and those without a history of suicide ($n = 35$). A MSSA was defined as a suicide attempt that necessitated hospitalization for at least 24 h, and either treatment in a specialized unit (including intensive care, hyperbaric and burn units), surgery under general anesthesia or extensive medical treatment (other than gastric lavage, activated charcoal or routine neurological observations) including antidotes for drug overdoses, telemetry or repeated tests or investigations. A MNSSA was defined as a suicide attempt that did not meet these criteria (Beautrais, 2001). For the present study, patients who had executed at least one additional suicide attempt since the index attempt were identified and classified based on the medical severity of the follow-up attempt: 1-MNSSA or 2-MSSA. Patients who had not made a suicide attempt since the index attempt were assigned a score of 0. Patients who had made more than one follow-up attempt were categorized according to the most medically severe attempt. As in our previous studies, a suicide attempt was defined as medically serious if it met Beautrais's (2001) criteria or if it was fatal.

2.2. Baseline measures

2.2.1. Aggressive-impulsive variables

The State-Trait Anger Expression Inventory (STAXI) (Spielberg, 1996) is a 44-item, multidimensional psychometric instrument comprised of 5 scales: the STAXI State Anger scale (S-Anger) measures the intensity of angry feelings experienced at a particular moment or designated time; the STAXI Trait Anger scale (T-Anger) measures individual differences in disposition to experience anger; the STAXI AX/Out, AX/In and AX/Con scales measure the frequency with which anger is expressed toward other persons or objects, the frequency with which anger is experienced but suppressed, and the frequency with which anger is controlled, respectively. For the present study, we used the 24-

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات