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## **Evidence based Psychiatric Care**

Journal of the Italian Society of Psychiatry

## Alexithymia, childhood maltreatment and suicide risk: an update

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### Summary

It is well known that persons with alexithymia may suffer from severe anxiety and depression, usually experiencing somewhat more significant psychological distress. There is growing evidence that alexithymia may be considered a risk factor for suicide, even basically increase the risk of development of depressive symptoms or per se. The role of childhood maltreatment seems to be a significant factor in the developing of alexithymic features and increased suicide risk. Therefore, the objective of this narrative review was to elucidate the possible relationships between alexithymia, childhood maltreatment and suicide risk. Taken together, almost all reviewed studies have pointed out a strong correlation between alexithymia, childhood maltreatment and increased suicide risk. In conclusion, the significance of alexithymia screening in daily clinical practice and the assessment of clinical correlates of alexithymic traits and childhood maltreatment should be essential parts of all illness managing programs and, particularly, of suicide prevention strategies and interventions. Moreover, clinical attention appears necessary concerning childhood maltreatment, preferably assisting such subjects in scaffolding and normalizing safe disclosure of childhood maltreatment, and delivering earlier interventions to protect against current mood and suicide risk symptoms.

Key words: alexithymia, childhood maltreatment, suicide risk, psychiatric disorders

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#### Introduction

It has been extensively proven that subjects with alexithymia may show affective dysregulation as well as the incapacity to self relieve and deal with emotions due to a relative lack of emotional consciousness <sup>1</sup>. Therefore, these subjects may suffer from severe anxiety and depression, usually suffering from a relatively higher psychological pain, and may be at risk of developing both inexplicable somatic symptoms and symptoms of emotional distress as they are, on a psychological point of view, inadequately furnished <sup>2.3</sup>.

Besides, numerous studies showed that alexithymics might insufficiently respond both to psychopharmacotherapy and psychotherapy. The typical characteristics of alexithymic behavior are mostly evident in social relationships with high emotional connotations <sup>4</sup>. A persistent affect-avoiding in interpersonal behaviors are rather distressing and may produce instability and struggles in

such significant relationships, subsidizing the increase of symptoms of anxiety and depression, thus increasing the possibility of suicidal ideation and behavior <sup>5</sup>. Likewise, it has been proven that alexithymia should be considered as a relative constant personality feature <sup>6,7</sup>, increasing susceptibility to depressive symptoms <sup>8,9</sup> and is mostly associated with a higher risk of death for numerous causes (accidents, injury, or violence) <sup>10</sup>.

There is growing evidence that alexithymia may be a risk factor for suicide, even basically increase the risk of development of depressive symptoms or per se <sup>11</sup>. This evidence comes out from the results of several studies conducted on both the general population <sup>12</sup> and clinical samples of patients with psychiatric disorders or medical conditions. Moreover, childhood maltreatment has been often associated with alexithymia and seems to be a risk factor for both developing alexithymia and suicide ideation. Therefore, the objective of this narrative review was to elucidate the possible relationships between alexithymia, childhood maltreatment, and suicide risk.

# Alexithymia, childhood maltreatment and suicide risk

Childhood maltreatment, such as sexual abuse, physical abuse, emotional abuse, and neglect, is an essential predictor of risky behaviors such as the increased risk of drug abuse, pathological gambling, substance abuse, dangerous sexual practices, and impulse dyscontrol. Furthermore, childhood maltreatment is one of the most critical risk factors for developing psychiatric disorders and suicide ideation and behaviors.

The relationships between alexithymia and childhood maltreatment were explored in numerous studies.

Yates et al. <sup>13</sup> demonstrated that experiences of child maltreatment were related to increased problematic Internet use (PIU) in a large sample of 1470 college students, and mediation analyses showed that this relation was partially explained by alexithymia. Swannel et al. <sup>14</sup> pointed out that child maltreatment, and in particular, physical abuse, was strongly related to the development of non-suicidal self-injury (NSSI), and this association was mediated by dissociation, alexithymia, and self-blame for females. The Authors concluded that altering attributional style (through cognitive therapy or emotion-focused therapy) and improving the capacity to regulate emotions (through dialectical behavior therapy) may contribute to the reduction or interruption of NSSI.

Ogrodniczuk et al. <sup>15</sup> collected data of 188 persons at three urban outpatient psychiatric clinics in Canada pointed out the role of alexithymia as a mediating factor between childhood maltreatment and somatic complaints in maturity. The results showed that the mediated relationship was specific to maltreatment involving physical abuse, sexual abuse, and physical neglect, and a core dimension of alexithymia (difficulty identifying feelings, DIF). Another study demonstrated that growing up in a punishing environment (such as being hit or beat or expected to obey to an austere code of behaviour) was indirectly associated with negative urgency via DIF dimension of alexithymia, suggesting that excessive use of punishment during childhood may shrink the development of the capacity to identify and give an explanation to feeling states <sup>16</sup>. This trouble in emotional processing may, in turn, lead to acting impulsively when emotionally stimulated. It has also been demonstrated that alexithymia may partially explain the associations between emotional neglect and symptoms of depression, anxiety, and loneliness that may be linked with increased suicide ideation <sup>17</sup>. Adverse experiences early in life can impair an individual's emotional processing, and these deficiencies in emotional functioning contribute to behavioral and interpersonal dysregulation, resulting in increased impulsivity and risk-taking that may further contribute to NSSI or suicidal behaviors <sup>18</sup>.

Concerning individuals with Bipolar I Disorder (BD-I), the results of a case-control study showed that patients with BD-I reported significantly more frequent abusive experiences in childhood, higher levels of attachment insecurities, more severe pathological and somatoform dissociation, as well as higher scores on measures of alexithymia <sup>19</sup>.

In conclusion, taken together, the results of the abovereviewed studies point out a close relationship between childhood maltreatment and alexithymia that may predispose the individual to an increased susceptibility to develop suicide ideation and behaviors.

Moreover, childhood maltreatment may also be directly linked to increased suicide ideation independently from alexithymia and this was demonstrated by several studies. The findings of a cross-sectional study by Pompili et al. 20 on 163 consecutively admitted adult inpatients suggested that exposure to abuse and neglect as a child may increase the risk of subsequent symptoms of more severe externalizing "male depression" (characterized by abrupt lowered stress tolerance, irritability, impulsive, aggressive, and/or psychopathic behavior, such as alcohol and/or drug abuse or abusive equivalents), which has been associated with higher suicidal risk. Falgares et al. <sup>21</sup> suggested that the combined effect of specific forms of dysfunctional parental behavior during childhood (such as lack of care and psychological abuse) and the development of rigid and dysfunctional negative personality traits may increase the risk for suicidal ideation and behavior during adulthood. Moreover, it is well known that impulsivity and childhood maltreatment may independently increase the risk of suicide attempts, self-injury, and interpersonal violence <sup>22</sup>. Childhood maltreatment may have a stronger effect on violence directed towards the self than on interpersonal violence, and this is valid in both genders <sup>23</sup>. Paul and Ortin <sup>24</sup> investigated self-harm behavior and suicidal ideation in children at the age of 9 years; childhood abuse and neglect had already been investigated at the children's age of 3 years within this longitudinal cohort, which adhered to a strictly prospective design. Most interestingly, they investigated potential pathways from early maltreatment to self-harm via different types of psychopathology. While neglect predicted both suicidal ideation and selfharm via internalizing psychopathology, physical and psychological abuse only predicted self-harm via more externalizing mental health problems.

In a study on a national sample of 530 Canadian men,

younger men exposed to childhood maltreatment reported significantly higher depression and suicide risk scores than their older peers who also had a maltreatment history <sup>25</sup>. Therefore the mood-related impact of childhood maltreatment is most significant during men's younger years. Recently, Goldberg et al. <sup>26</sup> assessed 165 patients with a principal diagnosis of major depressive disorder (MDD) and found that childhood maltreatment was a precise predictor of suicidal behavior among such patients, with a significant effect even after controlling for potential confounders.

# Studies on relationships between alexithymia and suicide risk in psychiatric disorders

Several studies on clinical samples of patients with mental disorders have confirmed the hypothesis that alexithymia may increase the suicide risk, primarily through the development of depressive symptoms.

The prevalence of alexithymia is relatively higher in subjects with psychiatric disorders <sup>27</sup>. Therefore, the studies on relationships between alexithymia and suicide risk on clinical samples of patients with mental disorders are fascinating as alexithymia may predispose to their development or worsen an existing one <sup>8,9,28,29</sup>.

The presence of alexithymic traits in patients with Anxiety Disorders (ADs) may be a risk factor of suicide, merely worsening the AD itself per se or leading to the development of depressive symptoms or even a comorbid Major Depressive Episode (MDE) <sup>2,30,31</sup>.

Regarding Obsessive-Compulsive Disorder (OCD), it has been found that alexithymia and depressive symptoms were considerably associated with OCD patients <sup>11</sup>. De Berardis et al. have demonstrated that OCD patients with alexithymia showed higher disorder severity, less insight, and inflated responsibility attitude, all related to suicide ideation, independently from depressive symptoms <sup>32</sup>. Again, in this research, the DIF subscale of TAS-20 was associated with higher SSI scores. Moreover, alexithymia and perfectionism have been found related to higher suicide ideation in patients with OCD <sup>33</sup>.

Also in patients with Panic Disorder (PD), a relationship between alexithymia and increased suicidal ideation has been found associated with a serum lipid dysregulation <sup>34</sup>. This positive correlation between alexithymia and increased suicidal ideation was substantially confirmed also in patients with Generalized Anxiety Disorder (GAD) (35). Only one study directly evaluated alexithymia and suicide risk in Posttraumatic Stress Disorder (PTSD), even if a relationship between alexithymia and post-traumatic symptoms has been revealed in other studies <sup>27,36-40</sup>. Kusevic et al. <sup>41</sup> evaluated 127 veterans from the 1991-1995 war in Croatia, and the study's results suggested that alexithymia can be considered as a risk factor for attempted suicide among war veterans with PTSD.

Despite the high number of studies that have evaluated the presence and clinical correlates of alexithymia in Affective Disorders such as MDD <sup>42-45</sup>, surprisingly, relatively few studies have directly investigated its relationships with suicide risk. Alexithymia may be a risk factor of suicide

in adolescent depression especially in presence of maladaptive early schemas <sup>46</sup>. Concerning adults, De Berardis et al. <sup>44</sup> evaluated 145 drug-naive adult outpatients with a DSM-IV diagnosis of MD and found that alexithymic patients showed higher scores on SSI, thus indicating a higher suicide risk. In a linear regression model, lower high-density lipoprotein levels, DIF, and "Difficulty in Describing Feelings" (DDF) dimensions of TAS-20 were associated with higher suicide risk. Serafini et al. (47) recruited 281 euthymic participants of which 62.3% with unipolar MD and 37.7% with bipolar disorder and showed that such patients with affective disorders might suffer from constant difficulties in processing sensory input which has been significantly linked with higher depression, impulsivity, alexithymia, and hopelessness. Lower registration of sensory input referring to hyposensitivity and sensation avoiding relating to hypersensitivity correlated considerably with higher alexithymia and, in particular, with DIF and DDF dimensions of TAS-20, accounting for higher impulsivity and hopelessness (that may be risk factors of suicide). Moreover, alexithymic subjects with MDD may characterize for homocysteine dysregulation that may be somewhat linked to suicide ideation, regardless depression' severity <sup>48</sup>. Finally, alexithymia and low resilience were significant predictors of increased suicide ideation in a sample of patient at first MD episode <sup>49</sup>.

Positive correlations between alexithymia and increased suicide risk have been found in other several psychiatric disorders. Somatoform disorder patients with lifetime suicide attempts might have more significant difficulties in identifying and describing emotions, and a propensity to intensely feel and express anger (50). Moreover, in patients with conversion disorder (CD), alexithymia is higher in suicide attempters <sup>51</sup>.

Several shreds of evidence point out that alexithymia may be a risk factor of suicide in Eating Disorders (EDs). For example, Carano et al. <sup>52</sup> demonstrated that individuals with Binge Eating Disorder (BED) might experience higher suicide ideation, particularly in the presence of alexithymia and depressive symptoms, even if these latter symptoms are subclinical. Alpaslan et al. <sup>53</sup> evaluated 381 female students in Turkey and found that disordered eating attitudes (DEAs) were frequently found among female students, and alexithymia was often correlated with increased suicide risk in adolescents with DEAs. However, no studies have been conducted to estimate the association between alexithymia and increased suicidal ideation in patients with anorexia nervosa and bulimia.

Moreover, several studies have pointed out that alexithymia can be a potential factor enhancing suicide and self-harm risk in individuals with Substance Use Disorders <sup>54-56</sup>.

To our knowledge, only one study has evaluated the relationships between alexithymia and suicide risk in schizophrenia and study results showed that alexithymia in schizophrenia was associated with more severe suicide ideation and depressive symptoms, regardless of the severity of both positive and negative symptoms <sup>57</sup>.

### Conclusions

Taken together, almost all studies have pointed out a direct or indirect relationship between alexithymia, childhood maltreatment and increased suicide risk.

These findings may be explained in several ways. One is in accordance to the Freyberger's theory of acute "secondary alexithymia" as a response to stressful events 58. Acute secondary alexithymia is considered a momentary, statedependent experience that may be a consequence of subjective distress, that decrease when an acute disease episode has resolved <sup>59</sup>. As the presence of alexithymia may worsen an existing psychiatric or medical disease, this worsening may be related to the development of suicidal ideation per se or through the development of depressive symptoms or even a comorbid clinically relevant MDE 4. The presence of childhood maltreatment may exacerbate the acute "secondary alexithymia," maybe through an increased stress sensitivity. As a consequence, it is possible to argue that higher state-dependent alexithymia may enhance the severity of underlying psychiatric disorders, thus increasing the risk of suicide.

Nevertheless, even if alexithymia may be a state-dependent phenomenon, it should be considered a relatively stable personality trait that may also be existing even before the onset of a psychiatric disorder or a medical disease <sup>6,7</sup>. Thus, our review findings are also in accordance with the "stress-alexithymia hypothesis" 60. Alexithymia may be a chronic disorder (maybe with an onset during infancy or early adolescence and often in consequence of childhood abuse or neglect) 14,54 characterized by a marked inflammatory state with an impaired Hypothalamicpituitary-adrenal (HPA) axis reactivity to even minor or modest life stressors <sup>61</sup>. Therefore, it should be considered as a chronic state reaction in reaction to stressful circumstances that may invariably complicate a psychiatric disorder or a medical illness 62. As well as it happens in secondary alexithymia, childhood maltreatment may increase the perceived stress in the alexithymic subjects and may further increase chronic HPA reactivity, thus leading to a possible heightening of suicidal ideation and behaviors 63,64.

In conclusion, the importance of alexithymia screening in everyday "real world" clinical practice and the assessment of quantifiable correlates of alexithymic traits should be essential parts of all illness management plans and, especially, of suicide prevention. Accordingly, focused clinical attention appears necessary for people with a history of childhood maltreatment, preferably assisting in scaffolding and normalizing safe disclosure of childhood maltreatment, and delivering earlier interventions to buffer against current mood and suicide risk symptoms.

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