



Attachment style and history of childhood abuse in suicide attempters

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ABSTRACT

Insecure attachment style has been observed in some people with a history of suicide attempt. Furthermore, some types of abuse in childhood may predict suicide attempt in adulthood. The purpose of this study was to assess the attachment style, history of abuse, demographic information and number of suicide attempts in suicide attempters. This cross-sectional study was performed on 80 suicide attempters in Tehran in 2017. Demographic information, suicide behavior, attachment style and history of childhood abuse were assessed in a psychological interview using the Revised Adult Attachment Scale. Of all, 38.8% had attempted suicide once and 45% had experienced heavy maltreatment in childhood. There was no significant correlation between the number of suicide attempts and the attachment style. History of abuse could predict the number of suicide attempts in 17.3%, which was not significant; 78.8% had avoidant attachment style. The frequency of avoidant and ambivalent attachment styles was higher in suicide attempters who had experienced maltreatment in childhood. Considering the important role of attachment style and history of abuse in attempting suicide, knowledge in this regard is important especially in those at risk of suicide attempt to plan early psychological intervention and prevent suicide.

1. Introduction

The attachment style theory assesses how a person perceives and experiences interpersonal relationships. The attachment style is linked to numerous physical and psychological phenomena (Palitsky et al., 2013). Attachment is described as an affective bond developed by someone to his significant others (Ainsworth, 1985). This bond, which is built between an infant and his/her primary care givers within the first few years of life, becomes an important part of his/her personality. This feature shows resistance to change during the entire lifetime and significantly determines the human behavior in life (Calisir and others, 2009; Bowlby, 1977). It leads to development of positive or negative internal working models about self and others. These models remain partially stable during adulthood and determine the attachment style. The attachment styles are described as secure, anxious-avoidant and anxious-ambivalent, which are the subtypes of insecure attachment style (Sumer and others, 1999). Adverse early attachment experiences and subsequent attachment insecurities during adulthood would lead to pessimism, low self-esteem, hopelessness and ultimately the risk of suicide. Insecure attachment style, especially anxious and unresolved traumas are associated with an increased suicide preoccupation and attempt risk (Minitati et al., 2017; Grunebaum et al., 2010). People with

insecure attachment styles have more suicidal ideation, attempts, and psychiatric disorders. Conversely, people with secure attachment styles have lower likelihood of reporting suicidal ideation, attempt, or anxiety disorder (Palitsky et al., 2013).

Meanwhile, a number of psychological states increase the risk of suicide including hopelessness, loss of pleasure in life, depression and anxiousness (Chehil and Kutcher, 2012). Depressive symptoms, family socio-economic status, familial situation, relationship with parents, school situation and substance abuse are significant independent predictors of lifetime suicide attempts (Roscoat et al., 2016). Depression is the most common psychiatric disorder in people who die by suicide. It is strongly associated with suicide and non-fatal suicidal behaviors in adults (Hawton et al., 2013). The effects of depression may be influenced by emotional and cognitive impairments. The disability and burden of emotional and cognitive impairments in depressed individuals may be relevant to cognitive impairments which are manifold and multilevel, equally affecting primary and complicated cognitive processes (Gonda et al., 2015). In fact, major depression is reported to be related to insecure, especially the fearful and preoccupied attachment styles (Calisir and others, 2009; Bifulco et al., 2006). Patients with depression are more anxious and more avoidant and show more insecure attachment styles. Suicide attempts are more common in

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depressed patients with fearful attachment style. The rate of secure attachment style is higher in healthy people compared to depressed patients with/without a history of suicide attempt (Ozer et al, 2015). While attachment style is accepted as a general risk factor for psychopathology (Stepp et al., 2008), depression is related to insecure especially fearful and preoccupied attachment styles (Calsiri, 2009). Thus, the interaction of attachment style and suicide is complicated and needs further investigation.

Another important factor that may play a role in suicide attempt is history of abuse or maltreatment in childhood. There is a significant association between the history of suicide attempts and history of sexual and physical abuse in childhood. History of childhood sexual abuse is a significant predictor of suicide attempt in adults (Jakubczyk et al., 2014). It is also a moderator of the relationship between attachment insecurity and frequency of psychological abuse. Attachment insecurity is a significant predictor of psychological abuse frequency, but only for average and very negative perceptions of psychologically abusive acts. Adults with higher attachment insecurity, who perceive psychologically abusive acts more negatively have experienced more frequent psychological abuse victimization (Taylor, 2013).

Child abuse or child maltreatment is physical, sexual, or psychological maltreatment or neglect of a child by a parent or caregiver, which may include any act or failure to act by a parent or other caregiver that results in harm to a child, and can occur at the child's home, or in organizations, schools or communities that the child interacts with. Generally, abuse refers to (usually deliberate) acts of commission while neglect refers to acts of omission. Child maltreatment includes both acts of commission and acts of omission on the part of caregivers that cause actual or threatened harm to a child (McCoy et al, 2013). In women with major depression and history of childhood sexual abuse, social maladjustment is associated with greater endorsement of death ideation. Avoidant and anxious attachment orientations moderate the social maladjustment and death ideation associations in some domains. Parent-role maladjustment is associated with greater odds of death ideation in those with lower attachment anxiety. There is a strong association between death ideation and social maladjustment, which suggests that death ideation may be specific to certain domains of adjustment for anxious and avoidant attachment styles (Smith et al., 2012). Chronic and acute interpersonal difficulties may be especially salient to the understanding of death ideation in mentioned population. Women who have experienced childhood sexual abuse are more likely to experience severe attachment disturbances and acute episodes of social maladjustment (Gamble et al., 2011). The insecure attachment style that results from childhood sexual abuse and associated developmental circumstances serves as an enduring point of vulnerability for death ideation (Alexander, 2009). Insecurely attached individuals are more likely to experience problematic outcomes because they are less likely to obtain the required support. Such expression of attachment anxiety or avoidance would be evidenced by social maladjustment or dysfunction. These episodes are more likely to result in death ideation when experienced by individuals higher in insecure attachment styles (Mickelson et al., 1997).

Thereupon, the attachment style and history of childhood abuse may play an important role in suicide attempts in adulthood. There are an estimated 10–20 million non-fatal suicide attempts every year (Bertolote and Fleischmann, 2002). Although attachment difficulties have been shown to be associated with suicidal thoughts and behaviors in children and adolescents (Baca-Garcia et al., 2007), few studies have examined these relationships in adults (Grunebaum et al., 2010). By acquiring better knowledge about suicide, we can design specific strategies to prevent it. Due to the gap of information regarding the childhood experiences of suicide attempters in Iran, including their attachment style and history of abuse, this study aimed to evaluate the prevalence of positive history of abuse (of any kind) in childhood in suicide attempters. Also, the attachment style of suicide attempters was

determined and the correlation between the demographic factors, history of childhood abuse, the attachment style and number of suicide attempts in suicide attempters was evaluated. The null hypothesis was that no correlation exists between the demographic factors, history of childhood abuse, the attachment style and the frequency of suicide attempts.

2. Materials and methods

This cross-sectional study was performed at the Loghman Hospital in Tehran in Oct–Nov 2017. We assessed the demographic information of patients, number of suicide attempts, methods of suicide, history of childhood abuse and attachment style in 80 suicide attempters. Our study population comprised of suicide attempters hospitalized in the Emergency Ward of Loghman Hospital. All participants gave informed consent before participation in the study. Demographic information (age, gender, occupation, educational level, marital status, number of children), frequency and method of suicide attempt, and history of any type of abuse (maltreatment, physical or sexual abuse) in childhood were collected via a psychological interview by a psychologist. Revised Adult Attachment Scale was also filled out by the patients. This standardized scale was first introduced by Collins and Read in 1990. It assesses a person's opinion about his or her communicational skills and intimate relationship style and has 18 sentences with 5-point Likert scale scoring system. This scale has three subscales of (I) dependency, which shows the degree of trust and leaning on others, (II) proximity, which shows the emotional and intimate relations with others, and (III) anxiety, which shows the fear of rejection. According to these subscales, three attachment styles of secure, anxious and avoidant are identified. The reliability coefficient of this scale is 0.68, 0.71 and 0.52 for proximity, dependency and anxiety subscales, respectively. The Cronbach alpha for this scale is 0.8, which reflects its high validity (Collins, 1996). Studies on the Iranian population also showed the validity of this scale to be 0.95 (Hamidi, 2008).

The inclusion criteria were: signing the informed consent form, age older than 18 years of age, having complete consciousness, not being in poisoned or drug withdrawal state, having a history of suicide attempt and being hospitalized in the hospital due to suicide attempt.

The exclusion criteria were: not giving an informed consent, younger than 18 years of age, losing consciousness, being in poisoned or drug withdrawal state, no history of suicide attempt, being hospitalized in the hospital for reasons other than the suicide attempt.

In analyzing the data, frequency (%) was reported for categorical variables, and the mean (SD) was reported for continuous variables. One-way ANOVA was used to analyze the correlation between demographic variables and number of suicide attempts and experience of abuse in childhood. The chi-square test was used to determine the relationship between the demographic variables and attachment style. The regression model was used to determine the relationship between the experience of abuse with number of suicide attempts. One-way ANOVA was used to assess the relationship between the attachment style and number of suicide attempts. Two-way ANOVA was used to determine the relationship between the attachment style, gender and number of suicide attempts. One-way ANOVA was used to assess the relationship between the attachment style and history of abuse. Data were analyzed using SPSS version 21 software.

All procedures were in accordance with the ethical standards of the institutional research committee and the 1964 Helsinki declaration. All participants gave informed consent for participation in the study.

3. Results

The mean age of patients was 27 ± 9 years. Of patients, 65.5% were females and 32.5% were males; 53.8% were married, 41.3% were single, and 5% were divorced or widowed. Also, 67.5% had no children, 11.3% had one child, 8.8% had two children, 8.8% had three children,

Table 1
Frequency of different attachment styles in suicide patients according to their demographic features (chi-square test).

		Attachment style			Total	P value
		Secure	Ambivalent	Avoidant		
Gender	Female	4 (7.4%)	43 (79.6%)	7 (13%)	54 (100%)	0.161
	Male	5 (19.2%)	20 (76.9%)	1 (3.8%)	26 (100%)	
	Total	9 (11.3%)	63 (78.8%)	8 (10%)	80 (100%)	
Occupation	Housewife	1 (4.8%)	18 (85.7%)	2 (9.5%)	21 (100%)	0.145
	Unemployed	3 (14.3%)	17 (81%)	1 (4.8%)	21 (100%)	
	Student	3 (20%)	10 (66.7%)	2 (13.3%)	15 (100%)	
	Employee	2 (50%)	2 (50%)	0 (0%)	4 (100%)	
	Others	0 (0%)	16 (84.2%)	3 (15.8%)	19 (100%)	
	Total	9 (11.3%)	63 (78.8%)	8 (10%)	80 (100%)	
Age	<20	3 (12%)	20 (80%)	2 (8%)	25 (100%)	0.707
	21–30	5 (14.3%)	28 (80%)	2 (5.7%)	35 (100%)	
	31–40	0 (0%)	7 (77.8%)	2 (22.2%)	9 (100%)	
	41–50	1 (11.1%)	6 (66.7%)	2 (22.2%)	9 (100%)	
	50 <	0 (0%)	2 (100%)	0 (0%)	2 (100%)	
	Total	9 (11.3%)	63 (78.8%)	8 (10%)	80 (100%)	
Educational level	Below high-school diploma	2 (6.7%)	25 (83.3%)	3 (10%)	30 (100%)	0.894
	High-school diploma and college degree	6 (14.3%)	32 (76.2%)	4 (9.5%)	42 (100%)	
	Bachelor's degree and higher	1 (12.5%)	6 (75%)	1 (12.5%)	8 (100%)	
	Total	9 (11.3%)	63 (78.8%)	8 (10%)	80 (100%)	

2.5% had four children and 1.3% had five or more children. In terms of level of education, 37.5% had educational level lower than high-school diploma, 52.5% had high-school diploma and college degree, and 10% had bachelor's degree or higher level of education. Of all, 26.3% were housewives, 26.3% were unemployed, 18.8% were students, 5% were employees and 23.8% were self-employed.

Of patients, 38.8% had attempted suicide once, 25% had attempted suicide twice or three times, 21.3% had attempted suicide 3–5 times, 10.1% had attempted suicide for 6–10 times, and 6.3% had attempted suicide for more than 10 times. Of all, 53.8% had attempted suicide with drug overdose, 6.3% with poisons, 2.5% with knife or sharp objects, 1.3 with narcotics and 36.3% with multiple methods. Also, 53.8% still had preoccupation with suicide and 56.3% were not happy being alive. Also, 12.5% had secure, 78.8% had avoidant and 8.8% had ambivalent attachment style.

According to Table 1, the chi-square test showed no significant difference in males and females regarding the attachment styles ($P > 0.05$). The chi-square test showed no significant difference in attachment style of patients based on their occupation ($P > 0.05$). The chi-square test showed that there was no significant difference among different age groups in attachment styles ($P > 0.05$).

The chi-square test showed no significant difference among patients with different educational levels regarding attachment styles ($P > 0.05$).

Table 2

History of childhood abuse.
Of all, 52.18% had experienced all three types of abuse. According to Table 3, there was a significant difference between various age groups in number of suicide attempts ($F = 3.761$, between groups $Df = 4$, within groups $Df = 75$, $P < 0.01$). Patients between 41 and 50 years had attempted suicide more than others.

There was no significant difference in number of suicide attempts of suicide attempters with different educational levels ($F = 1.266$, Between groups $Df = 2$, Within Groups $Df = 77$; $P > 0.05$).

There was no significant difference in number of suicide attempts of

Table 2
History of childhood abuse.

Abuse history	Maltreatment (%)	Physical abuse (%)	Sexual abuse (%)
Never	22.5	22.5	70
Mild	15	22.5	10
Moderate	17.5	17.5	7.5
Heavy	45	37.5	12.5

Table 3
Mean number of suicide attempts in patients in different age groups.

Age (years)	N	Mean	95% confidence interval for mean		Minimum	Maximum
			Lower bound	Upper bound		
>20	25	11.52	10.10	12.94	6	18
21–30	35	12.09	10.86	13.31	5	20
31–40	9	14.67	11.12	18.21	7	21
4–50	9	16.44	12.36	20.53	10	25
50 <	2	10.00	–2.71	22.71	9	11
Total	80	12.64	11.72	13.55	5	25

males and females ($F = 1.295$, Between groups $Df = 1$, Within Groups $Df = 78$, $P > 0.05$).

There was no significant difference in number of suicide attempts in suicide attempters with different occupations ($F = 0.933$, Between groups $Df = 4$, Within Groups $Df = 75$, $P > 0.05$).

There was no significant difference between different age groups in history of abuse ($F = 1.074$, Between Groups $Df = 4$, Within Groups $Df = 75$, $P > 0.05$).

According to Table 4, there was a significant difference in history of abuse among suicide attempters with various educational levels. Suicide attempters with lower than high-school diploma educational level had experienced abuse in childhood more frequently than others ($P < 0.05$).

According to Table 5, there was no significant difference between male and female suicide attempters in history of childhood abuse ($P > 0.05$).

According to Table 6, there was no significant difference among suicide attempters with different occupations in history of childhood abuse ($P > 0.05$).

According to Table 7, one-way ANOVA showed no significant difference in number of suicide attempts in suicide attempters with different attachment styles ($P > 0.05$).

Table 8

Two-way ANOVA showed that gender and attachment style had no significant effect on number of suicide attempts ($P > 0.05$).

In addition, it was showed that the interaction of gender and attachment style had not significant effect on number of suicide attempts ($P > 0.05$).

Regression analysis to assess the effect of history of childhood abuse on number of suicide attempts showed that, the coefficient of determination was 0.03, which means that history of childhood abuse can

Table 4
Mean frequency of history of abuse in suicide attempters with different educational levels.

Educational level	N	Mean	95% Confidence interval for mean		Minimum	Maximum
			Lower bound	Upper bound		
Below high-school diploma	30	2.9500	2.6534	3.2466	1.00	4.00
High-school diploma and college degree	42	2.4464	2.1886	2.7043	1.00	4.00
Bachelor's and higher	8	2.0313	1.2699	2.7926	1.00	3.50
Total	80	2.5938	2.4007	2.7868	1.00	4.00
ANOVA						
History of abuse		Sum of squares	Df.	Mean square	F	Sig.
	Between groups	7.250	2	3.625	5.350	.007
	Within groups	52.172	77	.678		
Total	59.422	79				

determine the suicide attempt in 0.3%.

The Durbin-Watson result was 1.5–2.5. It reflects the independency of the errors and according to the collinearity indicators, there was no collinearity between the predictor variables, and the results of regression model are reliable.

The variables were normally distributed and therefore the regression model was applicable. According to regression analysis, history of childhood abuse affected the number of suicide attempts by 17.3%. But this effect was not significant ($P > 0.05$).

As shown in [Graph 1](#), suicide attempters who had experienced maltreatment in childhood had significantly different attachment styles compared to others and avoidant and ambivalent attachment styles were more common in them ($P > 0.05$). But there was no significant difference in attachment style among suicide attempters who had experienced physical and sexual abuse in childhood.

4. Discussion and conclusion

In our study, the mean age of suicide attempters was 27 years and most of them were female (67.5%), married (53.8%) and did not have any children (67.5%). Having children may play a protective role against suicide attempt in our society. High rate of incomplete suicide in women in our population is in line with other studies. One study showed that the rate of completed suicide was higher in males than in females, and males were three to four times more likely to kill themselves compared to females ([Meier and Clinard, 2008](#)).

The most common method of suicide, which was by drug overdose (53.8%) may indicate easy access to drugs in our community. Furthermore, since women comprised the majority of our study population and as we know, men commit suicide using more fatal methods than drugs, the high incidence of suicide attempts with drug overdose in our study was justifiable. There was no significant difference between men and women in history of abuse. It reflects that both genders are at similar risk of being abused in childhood.

In our study population, 52.5% had high-school diploma and college degree while 52.6% were unemployed including housewives. This finding reflects the role of unemployment in attempting suicide, because unemployed patients are less regretful after suicide attempt and

have more suicidal preoccupation. Suicide attempters with lower than high-school diploma educational level had experienced abuse in childhood more frequently than others. It reflects the possible role of experiencing abuse in childhood in continuing education in adulthood. In a study on 409 suicide attempters and their paired controls, it was shown that having a low educational level and occupation as a farmer were risk factors for suicide attempt with low intent. Depression was found to be related to suicide attempt with high intent in subgroups of males and females between 35–54 or 55–70 years. Distinct characteristics were found in the suicide attempters with different intents ([Liu et al., 2017](#)).

Of all, 38.3% of our study population had attempted suicide once. This figure is worth considering because it shows the high possibility of more suicide attempts, especially by knowing that 53.8% still had preoccupation with suicide and 56.3% were not happy being alive. In our study, patients between 41 and 50 years had attempted suicide significantly more than others. A cohort study on this domain on suicide attempters for 37 years showed that suicides continued to accumulate almost four decades after the index suicide attempt ([Souminen et al., 2004](#)).

Multiple suicide attempters versus single attempters exhibit a greater degree of deleterious background characteristics such as history of childhood emotional abuse, history of family suicide, increased psychopathology, higher levels of suicidality and poorer interpersonal functioning ([Forman et al., 2004](#)). Actually, suicidal ideation and attempts might be the consequences of an underlying interaction between the emergence of psychiatric symptoms and the long-lasting patterns of inadequate attachment ([Minitati et al., 2017](#)).

In this study, most of our study population had avoidant attachment style (78.8%). In fact, most of the people who commit suicide in adulthood may have suffered inappropriate or insufficient primary care by their mothers or caregivers in childhood that has made them apathetic and eventually avoidant to their mothers. In a study investigating the relationship of suicide with attachment styles, insecure attachment was found to be associated with suicidal ideation and behavior. Dismissing the attachment style may predict an increased risk of suicide attempt ([Grunebaum et al., 2010](#)).

Suicidal ideation and behavior have been suggested to be related to

Table 5
Mean frequency of abuse experience in male and female suicide attempters.

Gender	N	Mean	95% Confidence interval for mean		Minimum	Maximum
			Lower bound	Upper bound		
Female	54	2.6898	2.4561	2.9236	1.00	4.00
Male	26	2.3942	2.0419	2.7466	1.00	4.00
Total	80	2.5938	2.4007	2.7868	1.00	4.00
ANOVA						
Experience of abuse		Sum of squares	Df.	Mean square	F	Sig.
	Between groups	1.533	1	1.533	2.066	.155
	Within groups	57.889	78	.742		
Total	59.422	79				

Table 6
Mean frequency of history of abuse in suicide attempters with different occupations.

Occupation	N	Mean	95% Confidence interval for mean		Minimum	Maximum		
			Lower bound	Upper bound				
Housewife	21	2.8333	2.4519	3.2147	1.25	4.00		
Unemployed	21	2.5000	2.1209	2.8791	1.00	3.50		
Student	15	2.5333	2.1152	2.9515	1.50	4.00		
Employee	4	2.2500	1.1727	3.3273	1.75	3.25		
Others	19	2.5526	2.0421	3.0632	1.00	4.00		
Total	80	2.5938	2.4007	2.7868	1.00	4.00		
ANOVA								
History of abuse	Between groups		Sum of squares	df	Mean square	F	Sig.	
	Within groups		1.950	4	.487	.636	.638	
	Total		57.472	75	.766			
Total							59.422	79

Table 7
Frequency of suicide attempts in suicide attempters with different attachment styles (one-way ANOVA).

	N	Mean	95% Confidence interval for mean		Minimum	Maximum
			Lower bound	Upper bound		
Secure	9	13.67	9.56	17.77	8	25
Ambivalent	63	12.33	11.36	13.31	5	22
Avoidant	8	13.88	9.94	17.81	8	21
Total	80	12.64	11.72	13.55	5	25
ANOVA						
Number of suicide attempts						
		Sum of squares	df	Mean Square	F	Sig.
Between groups		27.612	2	13.806	.812	.448
Within groups		1308.875	77	16.998		
Total		1336.487	79			

Table 8
Mean number of suicide attempts according to gender and attachment style (two-way ANOVA).

Descriptive statistics					
Dependent variable: number of suicide attempts					
Attachment style	Gender	Mean	Std. Deviation	N	
Secure	Female	14.25	7.805	4	
	Male	13.20	3.271	5	
	Total	13.67	5.339	9	
Ambivalent	Female	12.65	4.058	43	
	Male	11.65	3.407	20	
	Total	12.33	3.865	63	
Avoidant	Female	14.43	4.791	7	
	Male	10.00	.	1	
	Total	13.88	4.704	8	
Total	Female	13.00	4.425	54	
	Male	11.88	3.327	26	
	Total	12.64	4.113	80	
Tests of between-subjects effects					
Dependent variable: number of suicide attempts					
Source	Type III sum of squares	Df.	Mean square	F	Sig.
Corrected model	60.906 ^a	5	12.181	.707	.620
Intercept	3483.168	1	3483.168	202.068	.000
Attachment style* gender	60.906	5	12.181	.707	.620
Error	1275.582	74	17.238		
Total	14,113.000	80			
Corrected total	1336.488	79			

^a R Squared = 0.046 (Adjusted R Squared = -0.019).

the preoccupied attachment style (Wright et al., 2005), anxious attachment style (Stepp et al., 2008) and fearful and preoccupied attachment styles (Lessard and Moretti, 1998). There is a strong association between death ideation and social maladjustment, and death ideation may be specific to certain domains of adjustment for anxious and avoidant attachment styles (Smith et al., 2012). Therefore, clinicians should be aware of attachment issues in their patients to ensure better health outcomes and more effective physician-patient relationship (Palitsky et al., 2013).

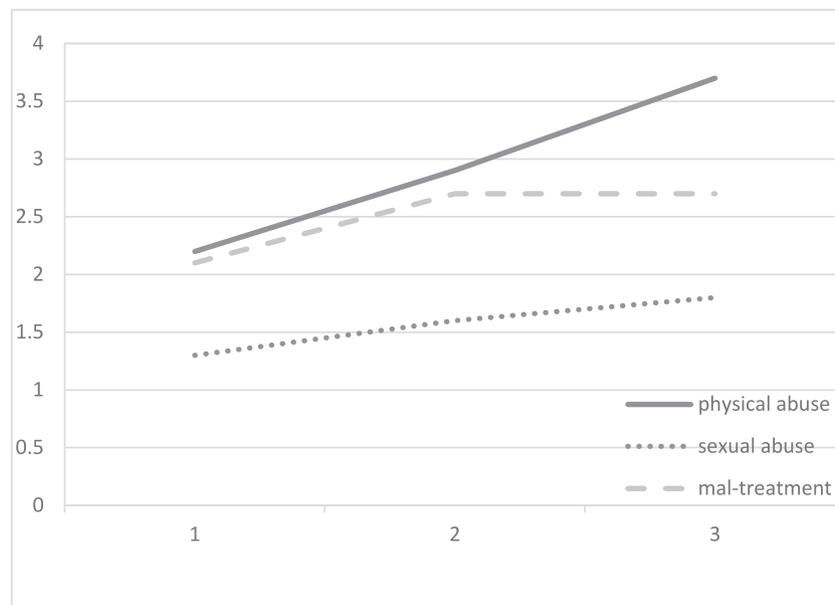
Avoidant and ambivalent attachment styles in our study were also more common in participants who had been maltreated in childhood. This finding shows the role of parenting and upbringing in the formation of attachment styles.

In women who have been the subject of sexual abuse in childhood, secure and anxious attachment styles are correlated with low and high depression scores, respectively. The effects of attachment style are stronger in cases who have been the victim of abuse types such as oral sex/penetration, a non-family member as perpetrator, and isolated, compared to continued abuse. These results confirm that characteristics of childhood sexual abuse (type of abuse, relationship with the perpetrator, and continuity of abuse) can affect the impact of attachment style on depressive symptomatology (Cantón-Cortés et al., 2015).

Of our study population, 45% had experienced heavy psychological maltreatment including neglect and 52.18% had experienced all three types of abuse including physical, sexual and maltreatment in childhood, which are high figures. In fact, in our study, experiencing any type of abuse in childhood affected the number of suicide attempts in 17.3%. Indeed, not experiencing care, tenderness and security in childhood may increase the possibility of suicide attempt when confronting problems in adulthood. Some studies also showed that lifetime experience of sexual abuse is a significant and independent risk factor for suicide attempts in alcohol-dependent individuals (Jakubczyk et al., 2014). Some researches identify that sexual abuse rather than a diagnosis of borderline personality disorder is a predictor for poor outcome after a para-suicide (Soderberg et al, 2004).

Some other studies have demonstrated diverse results regarding these variables. In orphaned children, while both physical and sexual types of abuse were significantly associated with lifetime pregnancy involvement and past year suicide ideation among females, physical abuse was significantly associated with lifetime pregnancy, and sexual abuse was associated with suicide ideation in males (Zapata et al., 2013). In women with bulimia nervosa, childhood emotional, physical, and sexual abuse are significantly associated with the presence of a lifetime suicide attempt, but childhood emotional and physical neglect are not associated with suicide attempts (Smith et al., 2015). Emotional abuse contributes to vulnerability towards psychosis both directly and indirectly through attachment insecurity (Goodall et al., 2015).

In our study, it was demonstrated that most of the suicide attempters had avoidant attachment style. Experiencing avoidant and ambivalent attachment styles in suicide attempters who had been



Graph 1. Frequency of attachment styles according to the type of abuse experienced in childhood (ANOVA).

maltreated is obvious. Middle aged participants had attempted suicide more than others, which may depict the peak age of suicide attempts in people at risk of suicide. Suicide attempters with lower than high-school diploma level of education had experienced abuse more frequently than others. Our results showed that experiencing abuse predicted the number of suicide attempts in 17.3%, which was not significant. The important aspect of this study was the novelty of these findings, compared to previous studies on suicide.

In conclusion, having a history of childhood abuse combined with attachment style formatted in childhood highlight the role of parenting as an implicational practice with lifetime impact that may predispose individuals to various acts in adulthood including suicide. Early communications of children with close relatives may impact their whole life, especially during crisis. It reflects the precious role of parents in raising children to strengthen them to confront future problems. The attachment style is firstly formed by such close relationships. This finding is a warning for parents and caregivers of children to well communicate with their children and also to protect them to prevent any type of abuse. Experiencing childhood abuse leaves serious sequels in the victims. The main caregivers of children should provide a safe environment for them to develop a sense of trust in them and empower them to confront difficulties in life and not to give up.

All in all, considering the important role of attachment style and history of abuse in suicide attempt, this topic is worth further investigation especially in people at risk of suicide attempt, to plan early psychological intervention and prevent suicide.

This study had some limitations. Generally, there is limited access to suicide attempt survivors in Iran, due to unwillingness to report suicide attempts. Suicide attempt is considered a great sin in Islam. Many suicide attempters and their relatives try to conceal the suicide attempt and pretend that it was an accident or physical illness. Therefore, many suicide attempts remain unreported, resulting in a small sample size. In addition, some suicide attempters were in critical condition and could not participate in the study. Suicide attempt by taking multiple medications all at the same time, substance overdose, eating deterrents or jumping from a height often cause multiple injuries and the patients may not be able to normally communicate with others for long periods of time.

Future studies with a larger sample size are required to further scrutinize the family history and background of suicide attempters, considering the gap of information in this respect.

Declaration of interest

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