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THE RELATIONSHIP BETWEEN CHILDHOOD MALTREATMENT AND SUICIDAL IDEATION AMONG ADULTS

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Abstract

Childhood maltreatment is the potential background under the umbrella of adverse childhood experience (ACE). The history of childhood trauma as well as child abuse can be affected lifelong through their adulthood stages. In addition, suicide is the most global issue among young generation. The present focused study determined to get the essence of the direction into the relationship between childhood maltreatment and suicidal ideation among adults in Bangladesh context. The cross sectional survey design was adopted for data collection purpose among 160 adults having age ranges between 18 to 40 years. Correlation analysis findings recommended that there is a strong association between childhood maltreatment and suicidal ideation (Spearman's rank order correlation coefficient, $r = 0.80$, $p < 0.01$) and (Kendall's tau-b rank order correlation coefficient, $r = 0.62$, $p< 0.01$). Furthermore, controlling with another aspect of chronological age, socio-economic status, profession and mental health service also indicating a moderate strong relationship between childhood maltreatment and suicidal ideation (Partial correlation coefficient, $r (160) = 0.62$, $p < 0.01$), (Partial correlation coefficient, $r (160) = 0.63$, $p < 0.01$), (Partial correlation coefficient, $r (160) = 0.60$, $p < 0.01$) and (Partial correlation coefficient, $r (160) = 0.68$, $p < 0.01$). The present research is the resource for mental health practitioner, academia, researcher, professional child psychologist, scholar, social worker etc who are willing to influence and contribute in mental health areas.

Introduction

Adverse Childhood Experience cover numerous types of violence such as physical, emotional and sexual as well as family or social context that is occupied in early childhood. ACE has a linkage with early childhood traumatic events that carry on physiological and/or psychological illness(1). In the long term, exposure to ACEs can lead to serious health conditions like heart disease, stroke and cancer later in life. According to John Bowlby's theoretical background, a lack of secure attachment from primary caregiver or attachment figures since early childhood would cause toxic and catastrophic stresses that will carry in later adult life spans(2). Childhood trauma emphasizes predisposition and/or precipitation

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factors like attachment and parenting style, parental conflict, parental attachment styles etc. Early childhood trauma and insecurity will trigger in couples and romantic life, which is named 'Attachment trauma'. Lack of proper support system and nurturance in an imbalanced family environment, would lead to psychological distressed, even suicidal attempt. The term Childhood maltreatment is defined within various natures, severity and categories of physical, sexual, psychological and emotional abuse and neglectful behavior or inhuman exploitation which would lead to harmful, risky or unethical as a consequence of barriers in social, psychological, interpersonal, intrapersonal, health, growth, development, security, protection and survival aspects of life. Formerly a primary study was run in San Diego, California which period duration was through till 1997. Research evidence has been shown that childhood maltreatment would associate with various type of physical dysfunctionality and other health complexity issues in the United States. A sound impact of Adverse childhood experiences/ACEs with contribution on drug abuse, obesity, excessive sexual smoking, alcohol dependency, sexually transmitted diseases and disability, infertility and attempted suicide in adult life which would lead a lethal influence in family, community and society[3].

Suicidal ideation indicates a belief or thought that leads to the termination of one's own life. There is a linkage between suicidal tendencies and mental health disorders, even any crisis or adverse situation. The degree or possibility of suicidal ideation is varied, passive suicidal ideation means only imagining or thinking about the image of dying, on the other hand, active suicidal means, planning, implementing or organizing the way, means or strategy to initiate suicide. Recent research findings revealed in the United States that 1.2 million would have suicidal thoughts, 3.5 million populations are planning, 1.4 million are attempted and around 47,000 people were successful in their attempt[4]. Researcher Nikolaidis et al. ran research among Balkan cultural areas including Albania, Turkey, Romania, Croatia, Greece, Siberia and Bulgaria which reported half of the participants within their holistic lifetime, they were victims of any type of physical and psychological violence[5]. Also, the maximum portion of females self-reported about their lifetime childhood sexual abuse experiences. In research resources 2015, suicide is 14th major cause of initiative to death and the major risk strategies are hanging, firearms or pesticides. A systematic review and meta analysis on 79 research studies within nursing and health system to see the relationship between childhood maltreatment and suicidal behavior[6].

The CDC (Centre for Disease Control and Prevention)- Kaiser Permanente Adverse Childhood Experience (ACE) study is the groundbreaking research about childhood trauma, abuse, neglect, household challenges, public health and mental health impact. Research findings of the original Kaiser Permanente among 17,000 participants showed that major depression and mood swings tendencies would highly occur for suicide[7]. Particularly, PTSD (Post traumatic stress disorder), Autism Spectrum Disorder-ASD,

Personality disorder, Borderline personality disorder, Schizophrenia would have a high tendency to attempt suicide. To view in this background to specify the objectives:

- To see the relationship between childhood maltreatment and suicidal ideation among adults[8].

- To examine the contribution of age, socio-economical status, profession and mental health services on the relationship between childhood maltreatment and suicidal ideation among adults.

Materials and Methods

Participants and Design of the study

The total participants of survey study was 160 (M= 78/46.7% & F= 82/53.3%) adult participants by using online based self-report procedure. The age range for this study was 18-40 years who were students, professionals or unemployed personnel and did or willing to seek mental health services during their lifetime across Dhaka-city-selectively recruited as research participants. Within Covid-19 pandemic context, we collected data through some authentic and professional communities in social media platform. In fact, majority of populations were came from student counselling center in some reputed universities (two public university and three private university) in Dhaka city. And, rest of participants were selected from some psychological/ counseling centers who were clients, employees, staff or mental health experts, located in Dhaka metro city. Participants were instructed through written and verbal form and before data collection phase, informed consent of participants were obtained ethically. It was needed approximately 20-25 minutes to complete the questionnaire. Participants were responded through Zoom medium and completed questionnaire by filling google research form. For any participant's further emergency mental health support for research participation issue, we recommended and referred resourceful psychosocial/mental health counselor/psychologist.

Ethical Permission

The data were collected from 05 September, 2021 to 03 December, 2021. The method and procedure in research survey consisted all were checked, corrected and approved by 'Research Ethics Committee', University of Dhaka, Bangladesh (DECP/09/10).

Measuring Instrument

The following Bangla adopted scales were used as measuring instruments:

1. Comprehensive Child Maltreatment Scale (CCMS)

2. Beck Scale for Suicidal Ideation (BSSI)

Personal Information Form

The PIF was consisted of demographic, personal and social information which included participant's age, gender, academic qualification, profession, marital status, socio-economic status and mental health service.

Comprehensive Child Maltreatment Scale

CCMS for adults, which was originally developed by Higgins and McCabe (2001), also culturally translated and adapted by Ferdous, Roy and Islam in the context of Bangladesh[16] (2020). The instrument was comprised of 22 items and a self-report measure depends on frequency and severity on five category- psychological maltreatment, physical abuse, witnessing family violence, neglect and sexual abuse from adulthood stage. Particular category psychological maltreatment, neglect and physical abuse each of contained 3 items on basis of 5 point scale (0= Never, 1= Occasionally, 2=Sometimes, 3=Frequently, 4=Very Frequently). And witnessing family violence category consisted only 02 items also based on 5 point scale. Another detail category of sexual abuse which was comprised of 11 items with 6 point rated scale (0= Never, 1= Once, 2= Twice, 3 = Three to sixth times, 4=7-20 times, 5= More than 20th times). The reliability coefficients for each category of subscales were: psychological maltreatment 0.797, physical abuse 0.795, witnessing family violence 0.892, neglect 0.847 and sexual abuse 0.837. In cultural adaptation, Cronbach's alpha and Test-retest reliability coefficient for the total CCMS were 0.844 and 0.958 respectively. Validation of the instrument was focused by content and convergent validity.

Beck Scale for Suicidal Ideation

Beck Scale for Suicidal Ideation/BSSI, was consisted of total 21 items. This widely accepted instrument had been accomplished psychometric evaluation by Uddin, Faruk & Khanam (2013)[17]. The original BSSI version was developed Beck *et al*., in 1988 which initially included 19 items[18]. The first 19 questions of this instrument were designed for purpose of -wish to live, wish to die, acceptance of suicidal attempts, reason for suicide, planning for suicide, opportunity and resource for suicidal attempt, risk for suicidal attempts and so on. And last two questions were based on frequency and severity of suicidal initiatives and also the nature of suicidal attempts. The scoring of items of this scale were ranged from 0 to 2. The measurement by Cronbach alpha of the internal consistency of original instrument was 0.87. And, In cultural adaptation for BSSI, the Cronbach coefficient alpha was 0.83. In cultural adaptation, there were considered five types of validity as: content, concurrent, construct, discriminant and factorial . The evidence results were indicated that lead to moderate level of satisfactory. After data collection, for data cleaning, coding and transforming, used SPSS (Statistical Package for Social Science) 22.0 version for data processing.

Data Analysis

After completion of Normality test (Shapiro-Wilk test, Kolmogorov-Smirnov test, showing Histogram and Q-Q plot), as researcher we conducted parametric correlation

test (Pearson's and Partial correlation test) to determine the association and direction between variables[19]. And finally, published the result, limitations and feedback

Results and Discussion

After estimation of descriptive statistics, depending on Parametric test with matching of some particular conditions, it was defined to conduct Pearson-moment Correlation and Partial Correlation (By measuring Shapiro-Wilk Test).

Depending on selected convenience sampling technique, after measuring Sapiro-Wilk test for normality data distribution, we selected and employed non-parametric test for statistical analysis[20]. With matching of some particular conditions in non-parametric test, it was defined to conduct Spearman rank order correlation, Kendall tau-b correlation and non-parametric partial correlation.

From Table-1, there is mentioned the level of significance is 0.000, which is greater than the significance value, 0.05. And the level of significance value, 0.000 is highly significant and the value of correlation r_s= 0.786 (Approximately, r_s=0.80) which indicated a close to highly strong and positive between childhood maltreatment and suicidal ideation[21].

Table 1. Nonparametric Correlations between Childhood Maltreatment between Suicidal Ideation

			Childhood Maltreatment Score	Suicidal Ideation Score
Spearman's rho	Childhood Maltreatment Score	Correlation Coefficient	1.000	0.786**
		Sig. (2-tailed)		0.000
		N	160	160
	Suicidal Ideation Score	Correlation Coefficient	0 .786**	1.000
		Sig. (2-tailed)	0 .000	
		N	160	160
Kendall's tau_b	Childhood Maltreatment Score	Correlation Coefficient	1.000	0.615**
		Sig. (2-tailed)		0.000
		N	160	160
	Suicidal Ideation Score	Correlation Coefficient	0.615**	1.000
		Sig. (2-tailed)	0.000	
		N	160	160

** Correlation is significant at the 0.01 level (2-tailed)

To assess the size and direction of the monotonic relationship between the rank scores of childhood maltreatment and suicidal ideation, spearman's rank order correlation coefficient (r) was calculated. The rank order correlation between two specific variables was highly strong and positive, rs (160)= 0.80, p<0.01, two-tailed. Prior to calculating r, the assumption of normality, linearity and homoscedasticity were assessed and found to be unsupported. Similarly, visual inspection of the scatterplot of childhood maltreatment

scores against suicidal ideation scores confirmed that the relationship between these variables are non- linear and monotonic.

From Table-1, we also confirmed that Kendall's tau_b indicated the rank correlation coefficient between childhood maltreatment and suicidal ideation was moderate strong and positive, T_b (160)= 0.615, p<0.01, two-tailed.

From Table-2, to see correlation (CCMS & BSS) within combined effect (with the effect of Age) the score, r=0.70. And controlling the effect of another variable (Age) the value of correlation, r=0.68. So, both value of correlations are closer and similar.

Table 2. Partial Correlations (controlling for Age of participants) between Childhood Maltreatment and Suicidal Ideation

Control Variables			Childhood Maltreatment Score	Suicidal Ideation Score
Age of participants	Childhood Maltreatment Score	Correlation	1.000	0.621
		Significance (2-tailed)		0.000
		df	0	157
	Suicidal Ideation Score	Correlation	0.621	1.000
		Significance (2-tailed)	0.000	
		df	157	0

From Table-2, with controlling the effect of another variable (age) the value of partial correlation, r=0.621, which was moderate strong and positive, r=0.62, n=160, p,0.01. This would an indication that age plays as a contributing factor on the relationship between childhood maltreatment and suicidal ideation among adulthood lifestage.

Table 3. Partial Correlations (controlling for Socio-Economic Status) between Childhood Maltreatment and Suicidal Ideation

Control Variable			Childhood Maltreatment Score	Suicidal Ideation Score
Socio-Economic Status	Childhood Maltreatment Score	Correlation	1.000	0.633
		Significance (2-tailed)		0.001
		df	0	157
	Suicidal Ideation Score	Correlation	0.633	1.000
		Significance (2-tailed)	0.001	
		df	157	0

From Table-3, it was clarified that with controlling another demographic variable socio-economic status/SES, the partial correlation coefficient, r=0.633 which was considered a moderate strong and positive correlation value, r=0.63, n=160, p< 0.01. The condition of social status, situation, stability and financial resources would differ and influence further life decision and resilience in adulthood (willingness/unwillingness to suicide) even facing challenges in early adulthood[22].

Table 4. Partial Correlations (controlling for Profession) between Childhood Maltreatment and Suicidal Ideation

Control Variables			Childhood Maltreatment Score	Suicidal Ideation Score
Profession	Childhood Maltreatment Score	Correlation	1.000	0.595
		Significance (2-tailed)		0.003
		df	0	157
	Suicidal Ideation Score	Correlation	0.595	1.000
		Significance (2-tailed)	0.003	
		df	157	0

From Table-4, it would visible, with association of two specific variables another major contributing variable, the coefficient of partial correlation, r= 0.595 and it was reflected as moderate strong and positive association, r=0.60, n=160, p<0.01. Through findings, we can infer for reason of possible professional satisfaction or dissatisfaction would modify/change (negative/positive) the scenario of suicidality or related, who were victims or survivors of childhood maltreatment.

Table 5. Partial Correlation (controlling for Mental Health Service) between Childhood Maltreatment and Suicidal Ideation.

Control Variables			Childhood Maltreatment Score	Suicidal Ideation Score
Mental Health Services	Childhood Maltreatment Score	Correlation	1.000	0.676
		Significance (2-tailed)		0.000
		df	0	157
	Suicidal Ideation Score	Correlation	0.676	1.000
		Significance (2-tailed)	0.000	
		df	157	0

From Table-5, for controlling another demographic variable mental health service, the partial correlation coefficient was r= 0.676, which considered as close to strong and positive

correlation value, r=0.68, n=160, p<0.01. This findings was showed that there would exist a strong influence on mental health services for those populations who were survivors or victims of child abuse/trauma or even witness that would lead to suicidal decisions with other similar mental health issues still now[23].

Though some barriers emerged in cultural, spiritual myth, value and belief system of participants during data collection about maltreatment and abuse experience and the concept of mental health[24]. Some of particular gender issues and confidentiality within mental health context would bias on background result. Nevertheless, these direction is a potential background and resource for mental health context.

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