ADVERSE CHILDHOOD EXPERIENCES AS PREDICTOR OF DEPRESSION AND SUICIDAL BEHAVIOR IN WOMEN

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ABSTRACT
This research was conducted to find out adverse childhood experiences as predictor of depression and suicidal behavior in women, to find out relationship between adverse childhood experiences depression and suicidal behavior, explore that which Adverse Childhood Experience are more common in these women. A correlational research design was used. 300 women who had depression with suicidal attempts were taken from the psychiatry departments of different government hospitals of the Lahore. The age range of women was between 19 to 40 years. Both married and unmarried women were taken for the study. Demographic form, Adverse Childhood Experiences Questionnaire and Beck Depression Inventory were used. Results showed that Adverse Childhood Experiences predict depression and suicidal behavior, and it also indicated strong association between adverse childhood experiences, depression and suicidal behavior in women. Physical, emotional, verbal abuse and physical neglect were more common in women who had depression and suicidal attempts. Childhood adversities are predictors of depression in women with suicidal behavior and these adverse experiences are strongly associated with depression and suicidal attempts in Pakistani women. Parents do not give proper attention to their children. Majority of children had to face a variety of problems in their childhood. Proper mental health facilities are not available in Pakistan. It is required to give proper attention in this area to save our women from these problems.
Keywords: Adverse, experiences, correlational, emotional abuse, physical neglect, suicidal behavior, mental health.

INTRODUCTION
Adverse Childhood Experiences are those stressful experiences that occur before the age of 18. Adverse childhood experiences include abuse or neglect, parental separation, family violence etc. When a person is exposed to stress, the adrenal system fight or flight or freeze response stimulates to protect him or her and gets out of danger. When a person is exposed to a stress which continues for a long time, that is a more harmful state of stress. Adverse childhood experiences cause harmful stress and many past researches showed that harmful stress in childhood can adversely affect the structure and functioning of a child's developing brain. This can cause difficulty to think rationally and has effects on relationships with others. Monroe and Simons (1991) in a stress sensitization theory explained that the adverse childhood experience increases a person's ability to develop depressive response in the reaction of stressing events, and causes them to experience depressive effects towards recent mild worry or higher sensitivity towards harsh frustrating incidents. Hammen et al. (2000) studied that those women who had exposure to childhood traumas such as domestic brutality and parents who had any mental health problems and heavy drinking are at a greater risk for depression after exposure to stress than those women who had not any history of trauma.

Depression is very common these days and it is a serious health issue. It causes the affected person to low at work, at school and his or her family life becomes disturbed because of depression, and due to depression the person commit suicide. Approximately 703000 people commit suicide in every year, and it is fourth cause of death. It is a very serious problem, it has an effect on families, communities and countries and it has serious effects on the families. It is a problem all over the world.

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It has been estimated that in poor and developing countries 77% of suicides took place (WHO, 2021). It has also been estimated that 150 million people have problems due to depression in their life and about 1 million commit suicide every year. Different studies showed different results that women live longer, but the quality of life is not good. Douki et al. (2007) studied that the ratio of depressive disorders in women is 41.9% as compared to men that is 29.3%.

Suicidal behavior is very common in all societies and culture. This behavior is very common and it occurred in different stages of life. Some studies have been conducted in Pakistani perspective showed that in Pakistan suicide rate is more common in younger people and most of them were below 30 years and most of them were women and ratio of suicide is more in married women, while in western countries marriage is a preventive factor against suicide. In Pakistan the family system and marital discord are very important causes of worry and tension. Pakistan is a low and middle income country and population is about more than 200 million, and it is the 6th highly populated country, and approximately 50% of its population is under 25 years (Mahar, 2014).

Kiani (2007) reported that Pakistan has four provinces (Punjab, Sindh, Balochistan and Khyber Pakhtunkhwa). These provinces have different languages, cultures, subcultures, ethnicities and religions. Pakistan has many problems, it has an unsafe political system and a very unstable administration. The health and social facilities are very poor. Mirza and Jenkins (2004) studied that in Pakistan Common Mental Disorders (CMDs) rate is up to 34% and depression is associated with some risk factors among women in Pakistan. Depression is the impact of social, emotional, and biological variables. Those individuals who have adverse childhood experiences and stressful life experiences like the death of closed ones, joblessness. These adversities cause depression. That will cause suicidal thoughts and leads towards suicidal behavior. Chapman et al. (2004) conducted a study on adverse childhood experiences and its relationship with depression. Results showed that when a person exposed to adverse childhood experiences it increases the risk of depressive disorders after many years of those experiences. Wan et al. (2019) studied the associations between childhood adversity and social support, with self -violent behavior and suicide and found that adverse childhood experiences and lack of social support has relationship with high risk of suicidal behavior.

These hypotheses were made to study the effects of adverse childhood experiences on depression and suicidal behavior of Pakistani women.

Hypotheses
- There is relationship between adverse childhood experiences, depression and suicidal behavior in women.
- Adverse Childhood Experiences are predictors of depression and suicidal behavior in women.
- Physical and emotional abuse are more common in women who had depression and Suicidal behavior.

METHODOLOGY

Correlational research design was used for this study.

Sample: 300 depressive women were taken. The age of the women was 19 to 40 years. Sample was taken from psychiatry departments of different government hospitals of Lahore. For this purpose a convenient and purposive sampling technique was used. Both married and unmarried women were taken for the study. Only those women were included in the study who had depression and had suicidal attempts within two years. And those women who had depression but had no suicidal attempt, any other mental or physical illnesses were excluded from the study. The time duration of this research was October, 2020 to April, 2022. It was a part of my PhD thesis.

Measures
- Demographic Form
- Beck Depression Inventory
- Adverse Childhood Experiences Questionnaire

Demographic Form

Demographic form was prepared which included the age, marital status, education, family system, socio -economic status, previous suicidal attempts and frequency of suicidal attempts.

Table No. 1
Demographics characteristics of women who had depression and suicidal attempts (N=300).

Demographic variables	f	%
Age		
19 to 29 years	177	59%
30 to 40 years	123	41%
Education		
05 to 10 class	104	35%
10 to 14 class	123	41%
Above 14 class	73	24%
Marital status		
Unmarried	180	60%
Married	120	40%
Socio economic status (monthly income)		
Below 30000	92	31%
30000 to 50000	83	28%
50000 to 75000	58	19%
Above 75000	67	22%
Any previous suicidal attempt		
Yes	170	57%
No	130	43%
Frequency of suicidal attempt		
1st attempt	140	47%
2 to3 attempt	97	32 %
3 and Above	63	21%

f=frequency, %=percentages

Beck Depression Inventory (BDI) (Beck, A. T., & Steer, R. A. (1993))
BDI is a self -report inventory. It has 21 items, which measures depressive symptoms like significantly low mood, social withdrawal, guilt, suicidal ideation, weeping spell, irritability, social withdrawal, inability to make decisions, difficulty to concentrate, disturbance of appetite and sleep, fatigued and loss of interest in sexual activity. It was developed to measure depression symptoms in normal and psychiatric patients. It is a 4 point Likert scale from 0 (symptom not present) to 3 (severe symptom). Urdu translation of Beck Depression Inventory was used. Permission was taken from the author.
Adverse Childhood Experiences questionnaire (ACEs)
This questionnaire was developed by Felitti et al. (1998) and it is 10 items scale, used to measure childhood adversities. It measures 10 adverse childhood experiences that are physical, verbal, sexual abuse, physical, psychological and emotional neglect, a parent who is used to drink, mother who face domestic violence, family member in jail, member of a family diagnosed with mental disorder, death, separation and divorce between parents,. Urdu translation of ACEs was used. Permission was taken from the author.

RESULTS
This research was conducted to find out the association between childhood adversities and depression in Pakistani women with suicidal behavior, and to explore that adverse childhood experiences as predictor of depression and suicidal behavior in women and to explore that which Adverse Childhood Experience is more common in these women.
Table No. 2 *Psychometric properties of adverse childhood experiences questionnaire and beck depression inventory (N=300).*

Scale	M	S.D.	Range	Cronbach's α
ACEs	5.53	1.96	.04-.88	.62
BDI	35.73	8.60	1.1-1.9	.90

Note: M=mean, S.D=standard deviation, ACEs=adverse childhood experiences, BDI=beck depression inventory.

Table indicates that the reliability of adverse childhood experiences in Pakistani women is in acceptable range while, on BDI Beck Depression Inventory which is showing depressive tendencies in Pakistani women with suicidal behavior is excellent.

Table No. 3

Pearson product moment correlation analysis showing Association between adverse experiences depression and demographic variables of women with Suicidal behavior (300).

Variables	N	M	S.D.	1	2	3	4	5	6
ACES	300	5.53	1.96	-	.90**	-.03	.00	.02	.02
BDI	300	35.73	8.60	-	-	-.03	.01	-.01	-.01
Edu.	300	1.89	.76	-	-	-	.22**	-.10	.05
SES.	300	2.33	1.13	-	-	-	-	-.18**	-.00
Family.s.	300	1.55	.49	-	-	-	-	-	-.06
Freq.	300	1.74	.78	-	-	-	-	-	-

*N=total participants, M=mean, S.D= standard deviation, frequency =number of suicidal attempts, ACEs=adverse childhood experiences. BDI=Beck depression inventory, Edu=education, Family.s..=family system, SES= socio-economic status, fre.= frequency of suicidal attempts. *p<.05, **p<. 01, ***p<.001.*

Table shows that adverse childhood experiences had significantly positive relation with Depression. Furthermore, education showed a significant negative relationship with the family system and a positive relationship with socio-economic status. As well as socio-economic status showed a significant negative relationship with the family system.

Table No. 4

Adverse Childhood Experiences as Predictor of Depression in Suicidal Behavior in women (N=300)

Variable	Model 1		
	β	B	S.E
Constant	13.84***		.63
ACEs	3.94***	.90	3.68
R^2	.81		
F	1334.25		

*ACEs=Adverse Childhood Experiences, Constant= Beck Depression Inventory. *p<.05, **p<.01***p<.001.*

Table indicates significantly positive results as the value of p<.001, .000. Adverse childhood experiences positively predict the depression that leads the women towards suicidal behavior.

The results showed that adverse childhood experiences predict depression that leads the women towards suicidal behavior.

Table 5

Independent Sample t-test indicating age difference on adverse childhood experiences and depression (N=300).

Variables	19-29 years		30-40 years		t	p	Cohen's d
	M	S.D.	M	S.D.			
ACEs	6.38	1.46	4.30	1.94	10.6	.000	1.21
BDI	39.24	6.61	30.69	8.65	9.69	.000	1.11

*Note: M=mean, S.D = Standard Deviation, ACEs=Adverse Childhood Experiences, BDI=Beck Depression Inventory, *p<.05, **p<.01, ***p<.001.*

Table indicates that there is significant positive relationship between adverse experiences depression and demographic variable of women with Suicidal behavior regarding age. As hypothesized in literature, this table justify that those women who had adverse childhood experiences in their childhood showed more depressive tendencies and afterward suicidal behavior is more common in early adulthood age range starting from19-29 years.

Table 6

Adverse childhood experiences, responses, frequencies and percentages in women with depression and suicidal behavior (N=300).

Variable	Responses	*f*	*%*
1-verbal	Yes	251	84%
	No	49	16%
2-physical	Yes	266	89%
	No	34	11%
3-sexual	Yes	78	26%
	No	222	74%
4-emotional	Yes	265	88%
	No	35	12%
5-physical neglect	Yes	256	88%
	No	44	15%
6-separation (parents)	Yes	148	49%
	No	152	51%
7-violence on mother	Yes	144	48%
	No	156	51%
8-someone in family was addict or smoker	Yes	128	43%
	No	172	57%
9-someone in family was disturbed	Yes	111	37%
	No	189	63%
10-someone in family went to jail	Yes	13	4%
	No	287	96%

F=frequency, %= percentage

       Above table shows that physical, emotional, verbal abuse and physical neglect were most frequent in Pakistani women. The loss of her parents due to divorce, death and separation was present in 49 % women, while 48% reported that they watched their mother was being abused, and 43 % reported that their family member was addict or smoker, 37% reported that someone in their family member was depress or had some mental issue.

       These results indicated that physical, emotional, verbal abuse and physical neglect was most common in women who had depression and suicidal behavior and other abuses were also present in them.

DISCUSSION

The aim of this research was to explore the adverse childhood experiences as predictors of the depression and suicidal behavior in Pakistani women and to rule out relationship between adverse childhood experiences and depression and to investigate that which adverse childhood experiences are more common in women who had depression with suicidal behavior. Results showed that adverse childhood experiences are strong determinants of depression and suicidal behavior in Pakistani women and there is also strong relationship between adverse child hood experiences and depression.

       Results revealed that 59% of women who had depression and suicidal behavior were 19 to 29 years old and the ratio in 30 to 40 years was 41%. These results are consistent with those studies which indicated that suicidal attempts are more common in younger women, and this is fourth most common cause of death in 15-29-year old women (World Health Organization, 2021). Mayer and Ziaian (2002) studied that women below 30 years are at high risk to commit suicide. These results match with our findings because in our study most of the women who had to face childhood adversities had depression and they also showed suicidal behavior were between 19 to 29 years old. Odegaard et al. (2021) explored that married couples have lower suicidal risk than unmarried men and women. Our research showed the similar results in this research 60% women who had depression and attempted suicide were unmarried while married women were married 40%. Our findings indicated that 31% women had a monthly income below 30000. Our results showed that 57% women had previous suicidal attempts, 47

% women had 1st suicidal attempts while 32 % had two or three suicidal attempts while 21% women had three and more suicidal attempts. Irigoyen et al. (2019) explored the same results in a study where (18.9%) re-attempted and 60% of re-attempts appeared within the 6 months of first attempt. Different researches explored that 30% of adults who had different psychopathologies, like anxiety, depression and suicidal attempts, the cause of these problems are childhood adversities (Fuller-Thomson, 2016). Our results also showed that adverse childhood experiences predict depression that lead them to suicidal attempts and it is also indicated that those women who had more exposure to childhood adversities had more severe depression. Adverse childhood experiences had strong relationships with women's depression and suicidal attempts.

Link between childhood adversities and depression is very high. It is suggested that adverse childhood experiences is a strong risk factor in the occurrence of depression and suicidal behavior. These results are also consistent with different studies which showed that exposure with different adversities had a negative effect on a person's health and happiness and these adversities affected their whole life (Petruccelli, 2019). It has been investigated that adverse child hood experiences had high association with depression and anxiety (Poole, 2017). Findings of this research also showed the same results.

Results indicated that physical, emotional, verbal abuse and physical neglect are the most important childhood adversities that the women had to face during their child hood which took them towards depression in adult hood and they had to become vulnerable to suicidal attempts. Racine, et al. (2018) explored that when a person had an exposure to violence and trauma in childhood it caused emotional problems in their adulthood. CDC (2020) conducted a study and found that those individuals who had to face four or more childhood adversities had to face problems, like anxiety, depression, suicidal attempts and addiction. When these results are comparable with previous studies. In this study most of the women had four and above adverse childhood experiences and they also had depression and suicidal attempts. Khan et al. (2015) explored that depression in females seemed to be affected due to exposure to emotional abuse at the age of 14, physical neglect at the age of 16, and due to physical abuse at 18 years. It seemed that women were exposed to one or more of these adversities 13 to 18 years of age. Thompson et al. (2019) explored that physical, sexual, and emotional abuse, a parent who was in jail, and if in a family some member had a history of suicide this is also increased the risk of suicidal attempts in later life. Our findings also showed that physical, emotional, and verbal abuse and physical neglect are more common in women who had to face distress from different relationships because of family problems and absence of mother because of separation, divorce and death. When the women witnessed that mother was abused, it had a major effect in their later life. It also affected their mental health and lead them to suicidal attempts.

Our findings suggested that those women who had depression and attempted suicide had many childhood traumas that made them vulnerable to depression and due to depression they attempted suicide. They were not able to face the world in a realistic manner due to their past bad experiences. They become sensitive and their frustration tolerance decreased, that's why they become emotionally disturbed and attempted suicide. They started to think that there is no purpose to living and it is better to end their life. This a reason behind their suicidal behavior.

LIMITATIONS
- Only those women who came to the hospitals for treatment were taken for the study there were a lot of women who had depression and attempted suicide were never came to the hospitals.
- Only 19 to 40 year old women were taken for the study. Those women who have depression and attempted suicide above and below from this age group were not included in the study.
- The main limitation of the study was that only women were taken for study and men were not taken. These results cannot be generalized to the whole Pakistani population.

Implication of the study
We used a standardized measures of adverse childhood experiences questionnaire and Beck Depression Inventory both have been translated and validated in the Pakistani population. This study provided us very useful information about the women who had adverse childhood experiences and had depression and suicidal attempts.

This study is important, its results showed that childhood adversities are very common in depressive women. Adverse Childhood Experiences questionnaire should be used for screening in hospitals. When psychiatric patients come for the first time in hospitals, there should be trained staff to

use questionnaires. There is a relationship between adverse childhood experiences and depression. It is essential to give importance to this problem, action should be taken at the family and society level. Family support programs should be started to improve the mental health of women.

Parents should be given awareness about the results of these problems and to guide them on how they can deal adequately with their child and to give them awareness about good touch and bad touch. It is also important to improve their parenting skills.

Women should be trained in stress management techniques to overcome their stressors. Cognitive behavior therapy should be used to overcome on depression, beside this to control future suicidal attempts families should be counseled how they can save women from suicidal attempts.

DATA AVAILABILITY

Research data is available to the corresponding author.

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