SURVEY REPORT

Depression and perceived attachment of adolescents with fathers having substance-abuse disorder

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Abstract

Objective: To understand the predictive role of perceived mother, father and peer attachment in depressive symptoms of adolescents living with fathers diagnosed with substance use disorder.

Method: The quantitative study was conducted at various drug rehabilitation centres in Karachi from January 2016 to September 2017, and comprised adolescents living with fathers diagnosed with substance use disorder. Inventory of Parent and Peer Attachment-Revised, Urdu version, and Centre for Epidemiological Studies-Depression Scale for Children, Urdu Version, were used to gather data which was analysed using SPPS 20.

Results: Of the 150 participants, 82(55%) were males and 68(45%) were females. The overall mean age was 13.44±1.50 years. Perceived attachment with mother, father and peers collectively contributed significant variance in the depressive symptoms of the subjects ($p=0.0001$). Independently, only perceived mother and father attachment played a significant role in such symptoms with highest prediction value observed on father attachment ($p<0.05$)

Conclusion: Perceived mother and father attachment were found to be significant predictors of depressive symptoms among adolescents living with paternal substance use disorder. Peer attachment was significantly linked to the symptoms, but did not have a definite predictive role.

Keywords: Perceived attachment, Mother attachment, Father attachment, Peer attachment, Depression, Adolescents. (JPMA 69: 1855; 2019) **DOI:10.5455/JPMA.15016**

Introduction

The transitions and transformations experienced in adolescence render this stage as a rebirth, characterised by changes in all significant domains, i.e. biological, cognitive, emotional and social.[1] Changes in these domains are influenced by several external and internal factors among which the foremost is parental attachment. According to the attachment theory, the formation of early relationships with parents or primary care-givers results in the development of attachment patterns which has an impact on the overall wellbeing of an individual.[2] In adolescence the attachment relationships also undergo transformation and regulate the formation of identity development.[3] Psychopathology in parents negatively impacts the well-being of parents which is linked to adequate parent-child relationship. Substance Use Disorder (SUD) in parents, specifically fathers, can have detrimental impact on family ecology.

In Pakistan, there is a significant prevalence of SUD and, according to the report of the United Nations Office of Drugs and Crime (UNODC) published in 2013, 6.7 million Pakistanis in the age range of 15-65 years misused illicit drugs.[4] Although scientific data is available on the prevalence of drug-related disorders in adults, but no study is available on the psychological well-being of children of people with SUD in Pakistan. Children living with parents who have SUD are often suffering from abuse and neglect which is linked to the development of insecure attachment patterns.[5] Moreover, SUD in one parent, such as fathers, is linked to disorganisation in the overall family system, contributing to poor parental practices. Children who experience neglect are prone to various psychopathologies, such as externalising behaviours, drug-related problems and depression.[6]

Initial model of attachment has given importance to mothers mostly as the most significant care-giver and contributor in the wellbeing of adolescents. Later, an integrated model of attachment emerged which indicated that attachment relationships with all significant caregivers integrate together and impact the development.[7] However, recent research indicates that each parent independently contributes to psychological development of adolescents in different domains.[8]

Studies are relatively scarce in understanding how perceived attachment with mother and father uniquely contributes to depression in families where fathers have

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SUD. Furthermore, autonomy development is also part of adolescence during which adolescents distance themselves from their parents and build relationships with peers in order to develop social integration. The increase of emotional investment with peers indicates that perceived peer attachment also has a significant contribution in adolescent wellbeing. Although closeness with peers facilitates individuation, but at the same time it predisposes adolescents to vulnerabilities as peers are not well-prepared to provide the needed emotional support. The current study was planned to understand how perceived attachment with mother, father and peers contribute to depression in adolescent children whose fathers have SUD.

Subjects and Methods

The quantitative study was conducted at various drug rehabilitation centres in Karachi from January 2016 to September 2017, and comprised adolescents living with fathers diagnosed with SUD. The sample was raised using cluster sampling.

First, the names of drug rehabilitation centres and non-governmental organisations (NGOs) working on SUD were identified and list of clients diagnosed with SUD according to the Diagnostic and Statistical Manual of Mental Disorders-V(DSM-V) of the American Psychiatric Association,[9] were obtained. Clients who were married and had adolescent children aged 12-16 years were selected. Adolescents included were those living with their biological parents (mother and father), had not been diagnosed with SUD, and did not have neurodevelopmental and language disorders.

Data was collected at the drug rehabilitation centres during the family visiting hours and the participants were also accessed in their homes with the outreach team of NGOs working on SUD. The process of data collection lasted from February to May 2017. All the forms were individually administered by the researcher and filled by the participants in a one-to-one setting after getting due consent from both the parents and the participants. Facilitation was provided to the participants in items where they had difficulty understanding. The subjects were first explained the format of the questionnaire and were asked to read the questionnaire item by item and to fill the form accordingly.

Other than the informed consent form, data collection set included a demographic information form, Inventory of Parent and Peer Attachment-Revised, (IPPA-R),[10] adapted and translated into Urdu[11] and the Centre for Epidemiological Studies-Depression Scale for Children (CES-DC),[12] translated and adapted in Urdu.[13] Before the administration of the questionnaires, two separate studies were conducted for validation of psychometric properties of the Urdu versions of IPPA-R and CES-DC. Firstly, through using the committee approach of forward and backward translation, the scales were finalised in Urdu language and then two separate studies were conducted for estimating reliability and validity of each scale. In order to ascertain reliability, Cronbach alpha, test-re-test and split-half reliability coefficients were calculated for both the scales. For measuring validity, construct validity was calculated. Both the scales showed sound reliability and validity values. Cronbach's alpha for Urdu version of IPPA-R was calculated separately for mother, father and peer attachment subscales. Alpha value for mother attachment was 0.884, father attachment was 0.865 and peer attachment was 0.884. IPPA-R showed good divergent validity with depression as a significant, moderate negative correlation was found between perceived mother attachment and depression (r= -0.491) and perceived father attachment and depression (r= -0.411). A significant negative weak correlation was obtained between perceived peer attachment and depression in the adolescent sample (r= -0.176). Similarly, Cronbach's alpha value for CES-DC's Urdu version was 0.841. CES-DC also showed good divergent validity as there was a significant, moderate and negative relationship between depression and trait emotional intelligence in adolescents (p=0.001). IPPA-R has 95 items and it is a self-reporting measure used to measure perceived attachment with mother, father and peers. The items are rated on a 5-point Likert scale (1 = almost or never true; 5 = almost or always true). It measures attachment in the dimensions of trust, communication and alienation.[14] CES-DC is a 20-item, self-reporting measure rated on 4-point Likert scale (0= rarely, 3= most or all) and measures depressive symptoms in children.

Data was analysed using SPSS 20. Initially a preliminary analysis of data was done to check for the assumptions required for standard multiple regression which was tested using regression equation which is as follows;

Y (depression) = $\beta_0+\beta_1$(mother attachment) + $\beta 2$(father attachment) + β_3(peer attachment). (1) The process of bootstrapping[15] was used to maintain the reliability and validity of the results. Descriptive statistics including mean and standard deviation (SD) were calculated. $P<0.05$ was considered significant.

Results

Permission to conduct research was acquired from Board of Advanced Studies and Research, University of Karachi

Table-1: Frequency of type and length of drug use in fathers of participants (=150).

Characteristics	Frequency	Percentage%
Use of drugs		
Fathers using drugs	150	100
Type of drug used		
Heroin	85	56.7
Charas	27	18.0
Alcohol	6	4.0
Cocaine	2	1.3
Length of drug use		
1-3 years	13	8.7
4-5 years	30	20.0
6-9 years	28	18.7
10-13 years	52	34.7
14-19 years	16	10.7
18-23 years	7	4.7
24-30 years	3	2.0

and the ethical approval for the use of data for research purpose was also taken from the participants and their parents through signing of informed consent form. Furthermore the research participants who had any neurodevelopmental disability, substance use disorder and whose one or both biological parents were not alive at the time of study were excluded from the study. Of the 150 participants, 82(55%) were males and 68(45%) were females. The overall mean age was 13.44±1.50 years. Also, 95(64.2%) subjects were living in a joint family system and 53(35.8%) in a nuclear family system; 121(80.7%) belonged to lower-middle socio-economic status (SES), 12(8%) middle and 17(11.3%) upper middle SES. Types of drugs abused by the fathers of the adolescent subjects were also noted (Table-1).

Mean of perceived mother attachment was 78.17±13.83 which was higher compared to perceived father attachment 59.42±14.07. Mean perceived peer attachment was 72.79±13.769. Mean value of depression was 36.10±9.215.

All attachment variables showed negative and significant correlation with depression (Table-2).

Regression analysis indicated that collectively the three predictor variables significantly contributed variance in the outcome variable of depression ($p<0.05$).

Father attachment showed the most significant, negative and moderate prediction of depression ($p=0.001$) whereas mother attachment showed a small, significant and moderate contribution in the symptoms ($p=0.025$). Peer attachment did not appear to be an independent predictor of depression in adolescents (=0.080) (Table-3).

Discussion

The results of the present study indicate that overall perceived mother, father and peer attachment contribute to depressive symptoms in adolescent children of fathers with SUD. However, individual prediction towards depression was seen only through perceived mother and father attachment, indicating that perceived peer attachment was not an independent predictor of depressive symptoms of adolescents in the current study.

Table-2: Pearson product moment of coefficient correlation values among mother, father, peer attachment and depression.

Variable	Depression	Mother attachment	Father attachment	Peer attachment
Depression	1			
Mother attachment	-.398*	1		
Father attachment	-.730*	.297*	1	
Peer attachment	-.262*	.325*	.143	1

Note. *p <.01.

Table-3: Standard multiple regression coefficients' results.

Unstandardised Coefficients				Standardised Coefficients	
Variables	B	SE	95%BCa C.I**	p-value <.05	β
Constant	76.021	4.012	68.6, 83.5	0.001*	
Mother Attachment	-0.109	0.048	-0.205, -0.011	0.025*	-0.164
Father Attachment	-0.436	0.037	-0.502, - 0.376	0.001*	-0.666
Peer Attachment	-0.076	0.042	-0.161, 0.010	0.080	-0.113

Note. N = 150. p<.05, R2= .581, adj R2= .572, F (3, 146) = 67.467, p = .000.
*significant values, p<.05.
**BCa C.I. = Bias corrected and accelerated confidence intervals.

The results are supported by the independent model of attachment[8] which indicates that paternal attachment is a more significant contributor of depressive symptoms in adolescent boys and girls along with self-worth and expectation from friends.[16] However, literature presents contrasting results in this domain. In a study conducted on the influence of mother, father and peer attachment on Iranian adolescents' depressive symptoms, it was found that attachment with mother contributed the most variance in the depressive symptomatology.[17] Although the present study has been conducted on adolescents, but a distinct characteristic of this study is that fathers of adolescents had an SUD diagnosis. Thus, paternal psychopathology appears to have a link with quality of perceived attachment which influences adolescent depression negatively.

The findings can also be interpreted through the lens of attachment theory[2] which considers early significant relationships essential for healthy development. In families where fathers have SUD, quality of parenting is affected which makes the developmental pathways of children sub-optimum, leading to various psychological problems.[18] However, the relationship between paternal SUD and perceived parental attachment is not linear, and a multitude of variables impact this relationship. SUD in any parent reduces the capacity to parent effectively, and it is further associated with psychological problems in children, poor marital relationships and socio-economic problems.[19,20] Thus, even if mothers are not diagnosed with SUD, still the presence of psychopathology in fathers impacts the overall parenting experience. Moreover, mother and father attachment are not totally independent of each other in predicting overall wellbeing of children as supported by the integrated model of attachment.[7] Hence, even if father attachment shows a higher prediction in adolescent depression, it can indirectly also influence the quality of perceived mother attachment.

Perceived peer attachment showed a significant negative correlation with depressive symptoms of adolescents but did not turn out to be a significant predictor, indicating that although peer relationships become significant in the specific age group, but parental attachments are more significant. Literature has previously highlighted the importance of analysing the role of peer attachments in a clinical group of adolescents.[21] Thus, the present study undertook peer attachment as a variable on the recommendations of the earlier study, but the results of regression analysis indicated that the relationship of perceived peer attachment and depression in adolescents was impacted by other variables which could be mother or father attachment. Alternatively, it can be seen that adolescents living in families with SUD have difficulty in trusting others due to conflicting family environment, thus it is hard for them to share their emotions hampering their communication.[22] Moreover, secure parental attachment is linked to formation of adequate peer relationships.[23] But, in families characterised by SUD in fathers, and disturbed parental relationships, could also impact the development of peer attachments. Further research is needed to clarify how peer attachment is influenced by other variables.

The current study has several limitations. A predictive model was used due to which causality could not be determined. Moreover, the participants were conveniently selected as no prior record of adolescents living with paternal SUD was present. Self-reporting instruments were used and a response bias could be present due to the cross-sectional nature of the study.

Conclusion

Influential predictors of depressive symptoms in adolescents living with fathers having SUD were perceived mother and father attachment, and the highest contribution was of perceived father attachment in adolescent depression.

Disclaimer: The text is part of a PhD thesis approved by the Board of Advanced Studies and Research (BASR), University of Karachi.

Conflict of Interest: None.

Source of Funding: None.

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