ORIGINAL ARTICLE

INTERNALIZING AND EXTERNALIZING SYMPTOMS IN CHILDREN OF PSYCHIATRICALLY ILL PARENTS

FAZAILA SABIH[1], ANIS UL HAQUE[2], ASIA MUSHTAQ[3], ADNAN SOHAIL[4], BUSHRA MUSAWAR[5]

[1]Assistant Professor Department of Behavioral Sciences & Psychiatry IIMC-T, Riphah International University Islamabad.

[2]Professor, National Institute of Psychology (NIP), Centre of Excellence, Quaid-i-Azam University, Islamabad.

[3]National Institute of Psychology (NIP),
Centre of Excellence, Quaid-i-Azam University, Islamabad.

[4]Consultant Psychiatrist, Pakistan Atomic Energy Commission (PAEC) Hospital Islamabad.

[5]Foundation University Islamabad.

CORRESPONDING AUTHOR: Fazaila Sabih, E-mail: fazaila.sabih@riphah.edu.pk

ABSTRACT:

OBJECTIVE
To calculate frequency of internalizing and externalizing symptoms in adolescent children of psychiatrically disturbed parents.

DESIGN
Cross sectional study

PLACE AND DURATION OF STUDY
The study was carried out at Pakistan Atomic Energy Commission (PAEC) Hospital Islamabad during June 2014 to October 2014.

METHODOLOGY
Sample included 128 adolescents divided into two groups. Group I comprised of adolescents (49) whose parents have psychiatric illness and the group II include the adolescents (79) whose parents have no history of psychiatric illness. The purposive sampling technique was used to select sample. The youth Self Report was used to assess internalizing and externalizing symptoms in adolescents.

RESULTS
Results showed a high percentage (61.9%) of internalizing and externalizing symptoms in adolescent children of psychiatrically ill parents as compared to adolescent children of parents with no psychiatric illness (27.9%). Adolescent girls reported more internalizing symptoms than the boys. They also reported overall higher percentage of emotional and behavioral problems. Results also revealed that late adolescent group reported more internalizing and externalizing problems relative to early and middle adolescent groups.

CONCLUSION
The findings reveal that adolescent children of psychiatrically children are at increased risk of experiencing emotional and behavioral problems and draw mental health professionals' attention to address this issue with robust clinical intervention programs.

KEY WORDS:
Internalizing and externalizing symptoms, Adolescent, Psychiatrically ill parents.

INTRODUCTION

Parental psychopathology has a significant negative impact on children's psychosocial adjustment and is considered an important point of intervention for at-risk children and adolescents. The psychiatric literature suggests that children who have a parent with mental disorder including parental depression, anxiety, substance abuse, personality disorders, schizophrenia and other psychiatric disorders are significantly at greater risk for developing multiple psychiatric disorders and report elevated rates of emotional and behavioral problems compared with children whose parents have no psychopathology.[1-6] Weissman highlighted that the disadvantages associated with growing up in a home with a psychiatrically ill parent persist over times which subsequently lead to negative mental health outcomes in children and adolescents.[7]

Adolescence is recognized as a distinct and crucial period of development in individual's life and the impact of parental psychopathology is magnified when children reach at the stage of adolescence. Emerging rapid changes during this transitional phase cause variable amount of stress in adolescents and make them vulnerable to emotional and behavioral problems.[8] Emotional and behavioral problems in adolescents can be categorized as internalizing and externalizing. Internalizing behavior problems include feelings of worthlessness or inferiority, anxiety, depression, somatic complaints without known medical cause, and social withdrawal. Conversely, externalizing behavior problems include aggressive behavior, difficulties with interpersonal relationships, rule- breaking and display of irritability and belligerence.[9] Studies suggest that gender differences exist in internalizing and externalizing problems with the prevalent notion that girls display more symptoms of internalizing behaviors such as depression and anxiety relative to boys who are more likely to show blatant externalized behaviors like physical bullying and aggression.[10]

Few studies have been conducted to assess behavioral problems in normal school children under age 11 years.[11-13] There is no research evidence available on emotional and behavioral outcomes in adolescent children overall and especially in parents with psychopathology in Pakistan. The purpose of the present

study is to find the prevalence of internalizing and eternalizing behavior problems in adolescents of psychiatrically disturbed and non-disturbed parents and to see whether they differ in presentation of internalizing and externalizing symptoms.

METHOD

Participants

Sample of the study consisted of 128 adolescents divided into two groups. Group I comprised of adolescents (49) whose parents have psychiatric illness and the group II include the adolescents (79) whose parents have no history of psychiatric illness. The purposive sampling was used to select sample. The parents with psychopathology were taken from psychiatric unit of Pakistan Atomic Energy Commission (PAEC) Hospital Islamabad. A semi structured case history form was administered to get details about parents' history of psychiatric disorders according to DSM-5 criteria.[14] Group I included the psychiatric patients having Major Depressive Disorder (19), Generalized Anxiety Disorder (10), Obsessive Compulsive Disorder (8) and Schizophrenia (12).

The adolescents with no parental psychopathology were taken from three govt. higher secondary schools of Rawalpindi. Parents of 136 adolescents were contacted for consent and 32 (23.5%) refused to allow their children to participate in the study, 25 (18.4%) did not meet the inclusion criteria (i.e., no parental psychopathology, intact family with no parental divorce or death, etc.).

Measures

Demographic information sheet and case history form was used to get information about psychopathology.

Youth Self Report (YSR)

Internalizing and externalizing symptoms in adolescents were assessed with the Youth Self-Report.[9] The YSR is a self-report measure for adolescents between the ages of 11–18 and contains 112 items. It is scored on a 3-point Likert scale (0 = Not True, 1 = somewhat or Sometimes True, and 2 = Very True or Often True). The YSR is grouped into two broader categories namely internalizing scale and externalizing scale. The YSR also yields a total problem score. The internalizing problems scale is consisted of the anxiety/depressed, withdrawn/depressed, and somatic complaints subscales whereas the externalizing problems scale includes rule-breaking behavior and aggressive Behavior subscales. The YSR has satisfactory internal consistency (α = .91 for Internalizing scale and .92 for the Externalizing scale) and test re-test reliability (r = .91 for the Internalizing scale and .92 for the Externalizing scale). The YSR has shown acceptable convergent validity with other emotional and behavioral functioning measures as well as evidence of content validity, criterion-related validity, and construct validity.[9]

PROCEDURE

First of all potential parents (with psychiatric disorders and with no history of psychiatric illness) were identified and contacted. After selection of parents, their adolescent children with age range of 12-18 were included in the study with the consent of their parents. Participants were briefed about the purpose of the research and were assured confidentiality of the information. They were given written as well as verbal instructions. They were asked to carefully respond to each item according to the instructions. Study measures were individually administered on all participants. Data was analyzed through SPSS 21. Raw scores and T scores were computed to analyze the data. Descriptive statistics were calculated to report the internalizing and externalizing symptoms in adolescents. Alpha coefficients were computed at the significance level of $p < 0.05$. Independent sample t-test (significance level $p < 0.05$) was applied to assess the gender differences as well as differences in prevalence of internalizing and externalizing symptoms in adolescents of psychiatrically disturbed parents and parents without history of psychiatric illness. Multivariate analysis of variance to see differences in adolescent age groups was applied.

RESULTS

One hundred and twenty eight adolescents participated in the present research. Among them 49 (38.3%) were from families of psychiatrically disturbed parents and 79 (61.7%) were from the families of normal parents with no history of psychiatric illness. Among 128 adolescents 62 were boys and 66 were girls. Age range of adolescents was from 12-18 with mean age of 13.92. Father education was slightly higher in both groups (See Table I).

Table 1
Distribution of Sample on the Basis of Demographics (N=128)

Variables	frequency	percentage	
Adolescent Data			
Age			13.92 (1.922)
Gender			
Boys	62	48.4%	
Girls	66	51.6%	
Adolescent Groups			
Early Adolescence	65	50.8%	
Middle Adolescence	47	36.7%	
Late Adolescence	16	12.5%	
Parent Data			
Parents with psychiatric illness	49	38.3%	
Type of illness			
Generalized Anxiety Disorder	10	20.41%	
Major Depression	19	38.78%	
Obsessive Compulsive Disorder	8	16.33%	
Schizophrenia	12	24.49%	
Father age			42.15(2.83)
Mother age			36.53(2.34)
Father education			12.96(1.82)
Mother education			11.14(1.76)
Parents without psychiatric illness	79	61.7%	
Father age			40.15(2.94)
Mother age			36.57(2.64)
Father education			13.64(1.91)
Mother education			12.26(1.89)

In the present study Conbach's alpha for the total YSR scale was 0.91, for internalizing scale 0.70 and for externalizing scale was .83. The alpha coefficient values indicate excellent to moderate level of internal consistency which suggests that YSR is an appropriate and relevant measure for Pakistani adolescent population to measure emotional and behavioral problems.

The overall frequency of emotional and behavioral symptoms in group I was 61.9%. On internalizing symptoms scale 58.1% adolescents were falling in clinical range and borderline range. On externalizing symptoms scale 51.6% were found to fall in clinical

range and borderline range. On the other hand in Group II overall frequency of emotional and behavioral symptoms was 27.9%. On internalizing symptoms scale 23.6% were in clinical and borderline range. On internalizing symptoms scale 21.4% were in clinical and borderline range.

Gender wise frequency distributions on total and internalizing/ externalizing scales were also calculated. Among 62 boys, 39.1% fell on clinical and borderline range, whereas 51.4% girls were rated at clinical and borderline range. On internalizing scale 29.1% boys and 37.7% girls reported the problems. On externalizing symptoms scale 35.2% boys and 31.6% girls were rated at clinical and borderline range.

Results described in Table II showed significant differences in internalizing and externalizing symptoms and overall total score. Adolescents of group I scored higher on total and other two scales. On internalizing scale mean of group I is 33.47 whereas mean of the other group is 16.27. On externalizing scale mean of group I is 25.12 and the group II is 15.57. On the total YSR mean is also higher in group one (97.49) which shows higher prevalence of emotional and behavior symptoms in adolescents of psychiatrically disturbed parents. Overall trends of results show that the internalizing problems are more prevalent in adolescents of psychiatrically disturbed parents relative to externalizing problems.

Table 2
Mean, SD, and t-value of adolescent with and without parental psychiatric illness on variables of the study (N = 128)

	Parents with psychiatric illness (n = 49)		Parents without psychiatric illness (n = 79)				95% CI		
Variables	M	SD	M	SD	t(126)	p	LL	UL	D
Internalizing behavior	33.47	9.13	16.27	5.44	13.374	.000	14.66	19.75	2.383
Externalizing behavior	25.12	11.96	15.57	6.78	5.769	.000	6.28	12.83	1.028
YSR Total	97.49	24.86	58.46	21.63	9.369	.000	30.79	47.28	1.669

Note. CI = Confidence Interval; LL = Lower Limit; UL = Upper Limit.

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Table 3:
Mean, SD, and t-value of adolescent boys and girls on variables of study (N = 128)

	Boys (n = 62)		Girls (n = 66)				95% CI		Cohen's
Variables	M	SD	M	SD	t(126)	p	LL	UL	d
Internalizing behavior	21.08	9.96	24.52	11.65	1.787	.076	-7.24	.369	0.318
Externalizing behavior	20.16	11.56	18.35	8.74	1.005	.317	-1.76	5.38	0.179
YSR total	70.08	29.81	76.52	29.53	1.226	.222	-16.82	3.95	.0218

Note. CI = Confidence Interval; LL = Lower Limit; UL = Upper Limit.

MANOVA was conducted to see the differences among different age groups (early, middle and late adolescents) for multiple variables of behavioral problems. As hypothesized, there were significant mean differences across all age groups for internalizing and externalizing behavior problems and non-significant findings for overall behavioral problems. Late adolescent group had more internalizing, externalizing and overall behavioral problems as compared to other two groups. Tukey post hoc analysis revealed that late adolescent group scored high means on internalizing, externalizing and overall behavioral problems and the mean differences between early and late adolescent groups were significant at p<.05.

Table 4:
Multivariate Analysis of Variance for Adolescent Groups for Variables of the Study (N = 128)

Measures	Early Adolescence (n=65)		Middle Adolescence (n=47)		Late Adolescence (n=16)		Post Hoc Analysis			
	M	SD	M	SD	M	SD	F	Early versus middle	Early versus late	Middle versus late
Internalizing behavior	21.1	10.3	23.3	10.9	28.7	12.5	3.276*	.524	.033	.201
Externalizing behavior	17.5	9.11	19.9	10.2	24.3	12.9	3.061*	.431	.046	.295
YSR total	68.65	27.7	75.0	26.0	87.9	42.4	2.883	.491	.050	.288

*df (2, 125), *p < .05*

DISCUSSION

This research work was undertaken to explore and delineate the psychological symptoms in adolescents of psychiatrically ill parents in Pakistan. The results of the present study revealed a high percentage of internalizing and externalizing symptoms in adolescent children of psychiatrically disturbed parents relative to adolescent children of parents having no psychopathology. Gender and age group wise differences were also observed. The findings of the present study are consistent with the previous findings which have reported higher prevalence of emotional and behavioral disturbances in children of psychiatrically disturbed parents. [5-17] These findings draw our attention to the psychological health needs of children of psychiatrically disturbed parents and demand for further exploring the mental health outcomes in these children in Pakistan. It also highlights the importance of designing effective intervention programs to combat the stress of living with psychiatrically disturbed parents.

Adolescent age wise differences were also calculated; results showed that late adolescent group reported higher level of emotional and behavioral symptoms as compared with other two groups. The findings are in line with the previous literature. [18] Late adolescence is now regarded as a separate period of development i.e. merging adulthood. During this potentially turbulent period adolescents engage in several important tasks such as obtaining higher education, beginning a career, consolidating identity processes, and showing more responsibility towards home and family. Therefore there is a sheer increase in the prevalence of both internalizing and externalizing disorders during this period. [19]

CONCLUSION

Overall findings of this study contribute significantly to the mental health literature particularly in local reference and provide a direction for future researchers to address the issue and highlight other aspects of the problems to validate the current findings with replication. The study must be viewed in the light of some limitations. The present study was conducted in one hospital only so the findings cannot be generalized. The findings of the present study will help adolescents, parents, clinicians, psychiatrists and psychologists to identify and address the issue with clinical intervention programs and to formulate a holistic approach in combating the adolescent issues in developing countries where no such strategies are ever undertaken in the past.

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