INTERNALIZING AND EXTERNALIZING SYMPTOMS IN CHILDREN OF PSYCHIATRICALLY ILL PARENTS

# FAZAILA SABIH1, ANIS UL HAQUE', ASIA MUSHTAQ', ADNAN SOHAIL4, BUSHRA MUSAWAR'

'Assistant Professor Department of Behavioral Sciences & Psychiatry IIMC-T, Riphah International University Islamabad. 'Professor, National Institute of Psychology (NIP), Centre of Excellence, Quaid-i-Azam University, Islamabad.

'National Institute of Psychology (NIP),

Centre of Excellence, Quaid-i-Azam University, Islamabad.

'Consultant Psychiatrist, Pakistan Atomic Energy Commission (PAEC) Hospital Islamabad. 'Foundation University Islamabad.

**CORRESPONDING AUTHOR: Fazaila Sabih,** E-mail: [fazaila.sabih@riphah.edu.pk](mailto:fazaila.sabih@riphah.edu.pk)

# ABSTRACT:



**OBJECTIVE**

To calculate frequency of internalizing and externalizing symptoms in adolescent children of psychiatricallydisturbedparents.

# DESIGN

Cross sectional study

# PLACE AND DURATION OF STUDY

The study was carried out at Pakistan Atomic Energy Commission (PAEC) Hospital Islamabad during June 2014to 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 IIinclude 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.

# KEYWORDS:

Internalizing and externalizing symptoms, Adolescent, Psychiatricallyill 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 withmental 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.'·' 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.'

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.' 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.' 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."

Few studies have been conducted to assess behavioral problems in normal school children under age 11 years."·" 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." 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 noparental 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 withtheYouth Self-Report.'The YSR isa 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 = VeryTrue 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 ( *a* = .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-relatedvalidity, andconstruct validity.'

## 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. lndependentsamplet-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 bothgroups (See Table I).

**Table 1**

Distributionof 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%** |  |
| **Fatherage** |  |  | 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 58.1o/o 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 groupII is 15.57. Onthe 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.

#### Table2

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

clinical and borderline range. On internalizing scale 29.1% boys and 37.7% girls reported the problems. Onexternalizing 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 groupIIis 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 3:

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

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Boys (n** - 62) | | | **Girls**  (n-66) | | 95%ClCohen's | | | | |
| **Variables** | **M** | SD | **M** | **SD** | 1(126) | p | LL | UL | d |
| **Internalizing**  **behavior** | 21.08 | 9.96 | 24.52 | 11.65 | 1.787 | .076 | - 7.24 | .369 | 0.318 |
| **Externalizing** | 20.16 | 11.56 | 18.35 | 8.74 | 1005 | .317 | -1.76 | 5.38 | 0.179 |
| **behavior** |  |  |  |  |  |  |  |  |  |
| YSR total | 70.08 | 29.81 | 76.52 | 29.53 | 1.226 | .222 -16.82 | | 3.95 | .0218 |

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

**Parents with Parents without psychiatric psychiatric**

**illness illness**

95%CI

(n-49) (n-79)

**Variables M** SD **M** SD 1(126) p LL UL D

**Internalizing** 33.47 9.13 16.27 5.44 13.374 .000 14.66 19.75 2.383

**behavior**

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

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Externalizing** | 25.12 | 11.96 | 15.57 | 6.78 | 5.769 | .000 6.28 12.83 1.028 | differences across all age groups for internalizing and externalizing |
| **behavior**  YSR Total | 97.49 | 24.86 | 58.46 | 21.63 | 9.369 | .000 30.79 47.28 1.669 | 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 |

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

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 borderlinerange.

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

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 lateadolescent groups were significant at p<.05.

#### Table 4:

Multivariate Analysis of Variance for Adolescent Groups for Variables of the Study**(N** = 128)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Measures** Early Middle Late  **Adolescence Adolescence Adolescence Post Hoc Analysis** | | | | | | | | | |
| (n | | -65) (n=47) (n-16) | | | | | | | |
|  | **M** | SD | **M** | SD M | SD |  | Early **versus middle** | Early **versus late** | Middle **versus late** |
| **Internalizing** 21.1 10.3 23.3 10.9 28.7 12.5 3.276\*  **behavior** | | | | | | | .524 | .033 | .201 |
| **Externalizing** 17.5 9.11 19.9 10.2 24.3 12.9 3.061•  **behavior**  2.883 | | | | | | | .431 | .046 | .295 |
| YSR total 68.65 27.7 75.0 26.0 87.9 42.4 .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. 1'·" 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 psychiatricallydisturbed parents.

Adolescent agewise 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." 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 acareer, 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.,,

# CONCLUSION

Overall findings of this study contribute significantly to the mental health literature particularly in local reference and provide adirection 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.

# REFERENCES

.Goodman SH. Depression in mothers. Annual review of clinical psychology. 2007;3:107-135.

1. Beidel DC, Turner SM. At risk for anxiety: I. Psychopathology in

the offspring of anxious parents. Journal of American Academy of Child and Adolescent Psychiatry. 1997;36:918-924.

1. Eiden RD, Colder C,Edwards EP, Leonard KE. A longitudinal study of social competence among children of alcoholic and nonalcoholic parents: role of parental psychopathology, parental warmth, and self-regulation. Psychology of Addictive Behaviors. 2009; 23:36-46.
2. Herr NR, Hammen C, Brennan PA. Maternal borderline personality disorder symptoms and adolescent psychosocial functioning. Journal of Personality Disorders. 2008; 22(5):451-465.
3. Donatelli JA, Seidman LJ, Goldstein JM, Tsuang MT, Buka SL.

Children of parents with affective and non affective psychoses: a longitudinal study of behavior problems. Am J Psychiatry.201O; 167(11):1331-8.

1. Oyserman D, Bybee D, Mowbray C. Influences of maternal mental illness on psychological outcomes for adolescent children. J Adolescence. 2002;25:587-602
2. Weissman MM, Wickramaratne P, Nomura Y, WarnerV, Pilowsky D,VerdeIi H.Offspring of depressed parents:20 years later. Am J Psychiatry. 2006; 163(6):1001-8.
3. Lerner RM, Steinberg L. Handbook of adolescent psychology. 2nd ed.New Jersey:John Wiley&SonsInc.2004.
4. Achenbach TM, Rescorla LA. Manual for the ASEBA School-Age Forms & Profiles. Burlington, VT:UniversityofVermont,Research CentreforChildren, Youth & Families. 2001.
5. Zahn-Waxler C, Crick NR, Shirtcliff EA, Woods KE.The origins and development of psychopathology in females and males. In D. Cicchetti & Cohen D.J (Eds.), Developmental Psychopathology: Vol. 1. Theory and method (pp.76-138). Hoboken, NJ: Wiley. 2006.
6. Javed AM, Kundi MZ, Khan AP. Emotional and behavioral

problems among school children in Pakistan. J Pak Med Assoc: 1992;42:181-184.

1. Syed EU, Hussein SA, Mahmud S. Screening for emotional and behavioral problems amongst 5-11-year-old school children in Karachi,Pakistan. Soc Psych PsychEpid: 2007;42:421-7.
2. Syed EU, Hussein SA, Haidry SZ. Prevalence of emotional and

behavioral problems among primary school children in Karachi, Pakistan-multi informant survey. Indian J Pediatr: 2009; 76:623- 627.

1. American Psychiatric Association. Diagnostic and statistical manual of mental disorders: DSM-5. Washington, DC: American Psychiatric Association.2013.
2. McLaughlin KA, Gadermann AM, Hwang I, Sampson NA, AI­

Hamzawi A, Andrade LH, Angermeyer MC., et al. Parent Psychopathology and Offspring Mental Disorders in the WHO World Mental Health Surveys. British Journal of Psychiatry.2012; 200(4):290-9.

1. Smith M. Parental mental health: disruptions to parenting and outcomes for children.Child Fam SocWork.2004;9:3-l1.
2. Goodman SH, Rouse MH, Connell AM, Broth MR, Hall CM,

Heyward D.Maternal Depression and Child Psychopathology:A Meta-Analytic Review. Clin Child Fam Psychol Rev. 2011; 14:1- 27.

1. Kessler RC, Chiu WT, Demler 0, Walters EE. Prevalence, Severity, and Comorbidity of I2-month DSM-IV Disorders in the National Comorbidity Survey replication. Archives of General Psychiatry. 2005;62:617-627.
2. Blonigen DM, Kramer MD, Krueger RF, Patrick CJ, Iacono WG, McGue M. Gender Differences and Developmental Change in Externalizing Disorders From Late Adolescence to Early Adulthood: A Longitudinal Twin Study. Journal of abnormal psychology. 2007;116(3):433-447.