

Prevalence and Pattern of Psychiatric Morbidity among Children Living in Orphanages of Kashmir

Mohammad Maqbool Dar¹, Syed Karrar Hussain², Sabreena Qadri¹, Syed Sajad Hussain³, Syed Seerat Fatima⁴

¹Department of Psychiatry, Institute of Mental Health and Neurosciences, Government Medical College, Srinagar, Kashmir

²Department of Child and Adolescent Psychiatry, National Institute of Mental Health and Neurosciences, Bangalore, India

³Department of Pharmacology, Government Medical College, Srinagar.

⁴Department of Psychology, University of Kashmir

Corresponding Author: Syed Karrar Hussain

Received: 29/09/2015

Revised: 22/10/2015

Accepted: 26/10/2015

ABSTRACT

Background: Despite evidences highlighting the effects of institutional rearing on young developing brain, orphanages continue to be the source of care for orphans and deprived children with restricted child raising alternatives especially in developing and third world countries. The institutionalization of orphans assume greater relevance in the context of being in the region of Kashmir where low intensity chronic conflict further increases vulnerability of the already marginalized group to mental health problems. Our aim was to determine prevalence and pattern of psychiatric morbidity among children living in orphanages of Srinagar, Kashmir.

Methods: It was a cross sectional descriptive study. A total 348 children were included in the study. Development and Well-Being Assessment Scale was used for one stage structured assessment of psychopathology. Data analysis was done by SPSS for windows 20.0 version.

Results: The prevalence of psychiatric morbidity was 40.52 % among the study sample with Separation Anxiety disorder (12.93%) being the most common followed by Depression (7.76%), Obsessive Compulsive Disorder (6.90%), Attention Deficit Hyperactivity Disorder (4.31%), Specific Phobia (4.31%), Social Phobia (1.72%), Panic disorder (0.86%), and Post Traumatic Stress Disorder (0.86%) contributing to the overall burden of psychiatric morbidity.

Conclusion: It can be concluded that psychiatric morbidity is highly prevalent in children living in the orphanages that needs to be looked into. Early identification and intervention can ameliorate their sufferings and improve the quality of their lives.

Keywords: Attention Deficit Hyperactivity Disorder, Orphanages, Obsessive Compulsive Disorder, Separation Anxiety Disorder.

INTRODUCTION

Ever since the pioneering studies of John Bowlby by the role of parental deprivation in the causation of psychological disturbances has been well recognized. [1] Children who experience early deprivation and neglect have a significantly increased risk of a range of emotional and behavioral disorders. [2,3]

There were, however, researchers who opposed the relationship of parental absence with psychopathology. [4] They argued that orphans are not at any particular disadvantage over equally poor non orphans [5] and stated that, with a control for wealth, "the death of a parent appears to make relatively little difference to children's educational chances." [6] It

has been reported that losing a parent exposes a child to long-term psychological disturbances, and is greater if the parent is of the same sex. [7] It has been suggested that it is not always the traumatic event as such but disruption and chronic pressure surrounding the traumatic event that are responsible for adverse long-term outcomes [8,9] and giving such children warm and good relations can ameliorate their psychological disturbances. [10-13]

The recognition of psychiatric problems in children by adults is important, as it is they who determine whether and where consultation and treatment will be sought. [14] In Indian sub-continent the practice of placing deprived children with minimum or no material and emotional resources in large residential institutes like destitute homes, orphanages, charity educational institutes, etc. has been prevailing since long and its rising trend in this region particularly in the valley of Kashmir warrants assessment of emotional and behavioral disorders in an attempt to identify these problems in order to rectify them through scientific interventions to ensure development of healthier personalities in the adulthood thereby bringing prosperity and overall human resource development in the region.

MATERIALS AND METHODS

The study was carried out to look for the prevalence and pattern of psychiatric morbidity among children living in registered orphanages of Srinagar Kashmir. After proper correspondence with Directorate of Social Welfare Kashmir formal permission was obtained to conduct the study among those orphanages registered therein. All the ethical issues were considered throughout the study. The study was cross sectional descriptive type.

Participants:

This study recruited children from the registered orphanages in Srinagar Kashmir. The list of registered orphanages was provided by Department of Social

Welfare Jammu and Kashmir. For the sake of anonymity only roman letters were ascribed to the orphanages. There were eight registered orphanages in the list which were located in Srinagar Kashmir, out of which two orphanages were run by the Government ascribed as orphanage II and orphanage III respectively. The remaining six were run by Non-Government Organizations. 44, 21, 44, 53, 42, 42, 43 and 59 children participated in the study from orphanages I,II,III,IV,V,VI,VII, and VIII respectively making total study sample of about 348 children. Orphanages II and VI were exclusively for girls (total = 63) rest all were primarily for boys. All children falling in age group 6-18 years old from both sexes, excluding those who fulfill exclusion criteria, were included in the study. The exclusion criteria were those children falling below 6 and greater than 18 years of age; in whom consent was not obtained; with less than 3 months of stay in orphanage; presence of mental retardation, organic brain disorder, serious physical disability and severe medical condition. The study was carried out from April 2013 to September 2014. Participants of study were identified from the register book provided by the respective orphanage. Interviewing of the children and adolescent and their caregivers was conducted in the respective orphanages premises. They were given full information about the study in their own languages, retained this information, understood its pros and cons fully and were able to communicate properly. Children who met the inclusion criteria were selected. Then informed consent both written and verbal was taken from the care-giver of the children as well as themselves who were above eleven years of age. One stage structured assessment of psychopathology was carried out. Opinion of consultant pediatrician was sought to rule out the medical conditions listed in exclusion criteria. I.Q. assessment was done by a consultant clinical psychologist

to rule out mental retardation wherever needed.

Instruments:

A *semi-structured questionnaire* was designed to collect information related to socio-demographic data and relevant variables of the children presented in Table 1. Information related to the data was cross checked in the register available in the records in the respective orphanages in order to ascertain its validity. Children with living parents admitted in orphanages were also included in the study under *social orphan* (Dillon, 2008).

Strengths and Difficulties Questionnaire (SDQ), self version for age group 11-17 years and teacher version falling in the age group 4-16 years. The SDQ version used is a brief 25-item instrument. It has five sub scales on emotional, conduct, hyperactivity, prosocial, and peer problems. With the exception of the prosocial scale, it gives total difficulties scores of 0-15 as normal, 16-19 as borderline and 20-40 as abnormal. The scale uses a three point format, with 0 corresponding to 'not true', 1 'somewhat true' and 2 'definitely true'. Care was taken to explain the questions in native understandable language wherever need arose. All the children (348 participants) in the study were rated as per SDQ generated scores and areas of difficulties were then focused while interviewing, following application of Development and Well-Being Assessment (DAWBA).

DAWBA: Assessment of emotional and behavioral disorders was carried out using the DAWBA developed by Goodman et al (2000). It is an internationally well accepted research instrument, and a novel package of questionnaires, interviews, and rating techniques designed to generate ICD-10 psychiatric diagnoses among children and adolescents of 5 to 16 years (extended up to 18 years). It primarily focuses on the common emotional, behavioral and

hyperactivity disorders and also covers less common disorders more briefly.

The interview questionnaires were administered and verbatim accounts of any reported problems were recorded and formal Mental Status Examination (MSE) where appropriate, was done, without rating it. Experienced clinician (consultant psychiatrist) subsequently reviewed both verbatim accounts and answers to structured questions before assigning diagnoses according to ICD-10 criteria. Management plan of those with morbidity was later devised, whosoever required, in the form of psychotherapy, medication etc.

Data were tabulated and was analyzed using Statistical Package for Social Sciences (SPSS) windows version 20.0 and presented according to the objective of the study.

RESULTS

Table 1: Participant characteristics

Variable	Mean (SD)	Frequency	Percentage
Gender			
Female		63	18.10
Male		285	81.90
Age (Years)	12(2.09)		
Domicile			
Rural		333	95.69
Urban		15	4.31
Birth Order			
1 st		9	2.57
2 nd		165	47.41
3 rd		147	42.24
4 th		27	7.76
Type of Orphan			
Maternal		3	0.86
Paternal		285	81.91
Double		15	4.31
Social		45	12.93
Length of stay(years)			
<1		75	21.56
1-4		195	56.03
5-8		54	15.52
≥9		24	6.90
Cause of Parental Death ^a			
Firearm (combat related)		51	16.05
Medical illness		207	65.09
Accident		54	16.93
Homicidal ^b		3	0.94
Suicidal		3	0.94

Note: ^a Total number of deaths=318(288 single parent deaths +15 double parent deaths) whereas the rest of frequency column denotes number of children=348; ^b homicide other than combat related firearm injury.

Most of the orphans were from rural background as depicted in Table 1 and almost all the participants in the study were from lower socioeconomic class with primarily poverty being the reason for their residential care in orphanages. The participant characteristics are depicted in Table 1.

The pattern and prevalence of psychiatric morbidity as presented in Table

2 revealed 40.52% total morbidity with the most common diagnosis of separation anxiety disorder (12.93%). Depression (7.76%), obsessive compulsive disorder (6.90%), attention deficit hyperactive disorder (4.31%) and specific phobia (4.31%) formed the major chunk of the psychiatric morbidity.

Table 2: Pattern and prevalence of psychiatric morbidity in children

Psychiatric Disorder ^a	Number of Children	Prevalence(N=348)
Separation Anxiety Disorder(SAD)	45	12.93
Depressive Episode	27	7.76
Obsessive Compulsive Disorder(OCD)	24	6.90
Attention Deficit Hyperactive Disorder(ADHD)	15	4.31
Specific Phobia	15	4.31
Social Phobia	6	1.72
Dissociative Disorder	3	0.86
Post Traumatic Stress Disorder(PTSD)	3	0.86
Agoraphobia with Panic Disorder	3	0.86
Total	141	40.52

Note: ^a Only single psychiatric diagnosis (primary diagnosis) was considered where there were multiple diagnosis in a single child.

There were 36 children out of 348 participants, with other concerns not amounting to any major psychiatric disorder; nevertheless, they formed the additional burden of 10.34% to the total prevalence of psychiatric morbidity. Occasional nocturnal enuresis was the most common among this group forming 3.45% followed by sleep problems (2.59%) and 0.86% each of problems in speech fluency, nonspecific headaches, distressed being bullied, uneasy feelings and nonspecific tics.

DISCUSSION

The prevalence of psychiatric morbidity in our study is consistent with the result obtained by other study. [15] A representative study conducted in orphanage in Karachi, Pakistan revealed over all prevalence of behavioral disorder 33% [16] slightly lower than found in our study while in another study conducted in three private orphanages in Cairo the prevalence of emotional and behavioral disorders was 64.53%. [17] These differences in the prevalence of these studies can be partly explained by the differences in sample size and different

methods of assessment involved in these studies. Partly it can be explained by the differences in the socio-demographic variables that are related to the prevalence of psychiatric morbidity. [18]

SAD was the most common psychiatric disorder in our study forming 12.93% of the total study sample consistent with the study by Mohamed A EL Koumi et. al. which is much higher than the prevalence of the disorder of 4.1% in the general population. [19] Depression was found to be the second most common disorder (7.76%), an almost similar findings in other two studies. [17,20] The higher prevalence in our study may be explained by various variables including most of the children had lost one of their parent before the age of 11 years, all were from lower socioeconomic class which are known risk factors for the development of depression. [21,22] OCD came out to be the third most common disorder among children in our study comprising 6.90% of the total sample which is higher than life time prevalence of 0.6% found in the community sample in India [23] and 2-3 % rate reported in the European and North American studies. [24] It can be argued that

OCD in children is yet an under diagnosed entity in children because of limited insight into abnormality of their symptoms, secrecy often children display in reporting embarrassing thoughts and behaviors and inability to recognize symptoms by caregivers. [25] Since in our study, males outnumbered females by 4.5 times and because of gender differences in OCD among children with male preponderance in juvenile OCD, higher prevalence in our study can be explained. [26,27] Lack of parental emotional warmth, [28,29] more negative life events [30] and parental withdrawal of attention [25] have been studied to be significantly associated with juvenile OCD. Moreover protected environment [28] and excessive religious morality [31] have been associated with OCD although; some argue religiosity only affects the form in which obsessive compulsive symptoms are displayed. [32,33] OCD has also been found to be stress sensitive, and many children experience acute symptom exacerbations during times of psychosocial stress or change. [25] All these factors may explain the higher prevalence of the disorder in our study. The prevalence of ADHD was 4.31% almost consistent with the findings of the study by Margoob et.al. [20] While the prevalence of ADHD was found to be higher in two community studies of about 10-20% and 11.33%. [34,35] Lesser prevalence of externalizing disorders like ADHD in our study as compared to the findings of other studies which can be attributed, possibly, by the strict discipline and intolerance of such behaviors by the caregivers and management staff of the orphanages for staying in the residential care. The prevalence of specific phobia, social phobia and agoraphobia with panic disorder was found to be 4.31%, 1.72% and 0.86% respectively. Data from developed countries suggest that specific subtypes of anxiety may have different peak periods of onset; overanxious disorder in late childhood; social phobia in middle childhood; panic disorder in late

adolescence; generalised anxiety disorder in young adulthood. [36] This can explain the differences in prevalence among different anxiety disorders with attribution to the socio-demographic variables in our study sample. Higher prevalence of anxiety disorders as compared to community sample may be attributed to the various parameters associated with institutionalization. [37]

The prevalence of PTSD was 0.86% in our study which was lesser than findings of the study conducted by Margoob et.al. (2006) where PTSD was the most common psychiatric with prevalence of 17.11%. The lesser prevalence of PTSD in our study can be explained by the decline in the violence related deaths and traumatic events post 2003 in Kashmir and the transition of geopolitical conflict from armed uprising to non violent movement [38] as compared to the study conducted by Margoob et.al. (2006) where almost all children had experienced the traumatic event in the form of death of father, which was sudden, unexpected mostly associated with armed conflict post 90's in Kashmir. [20] Moreover in our study, the most common cause of parental death was medical illness almost 65.09% while only 16.05% deaths were reported due to firearm reflecting the changing pattern of deaths over the last decade.

Limitations

The reliance on western orientated questionnaires and lack of a locally developed checklist and instrument to measure potentially confounding socio-demographic factors can be one of the limitations of our study. Observations made from our study cannot be generalized owing to limited number of orphanages studied. It was only a cross sectional design, with no control group to compare in the community, which could establish a causal relationship. Moreover there was lesser representation of female children lack of follow up for the

emergence and evaluation of psychopathology in the children.

CONCLUSIONS

The children living in the orphanages had substantial psychiatric morbidity especially in the low intense chronic conflict torn region of the Kashmir wherein the pattern of psychiatric morbidity varies over time but it shows consistent results of high prevalence. More internalizing disorders were seen in this subset of population than externalizing disorders. With regard to the mental health problems, early diagnosis and timely intervention is needed to ameliorate their sufferings and improve the quality of their lives. Although changing trends in social fabrics restricts our alternative modes of care and rearing for this vulnerable group, nevertheless, it should not deter us to explore through scientific research and finding remedial measures to mitigate their sufferings.

ACKNOWLEDGEMENT

Special thanks to all those heads of orphanages whose consent and permission was a jugular vein for this study; the caregivers of the children and all those living in the orphanages who gave their valuable time and information to make this study possible.

Conflict of interest: No conflicts of interest to declare.

REFERENCES

1. Bowlby J. Maternal care and mental health. Monograph series Geneva, W.H.O. 1952.
2. Cicchetti D. and Barnett D. Attachment organization in maltreated preschoolers. *Developmental Psychopathology*.1991; 4:397-411.
3. Anna T. and Smyke. Attachment disturbances in young children: The continuum of caretaking causality. *Journal of American Academy of Child Adolescent Psychiatry*. 2002; 41(8):972-82.
4. Munro A. Parent-child separation - Is it really a cause of Psychiatric illness in adult life? *Archives of General Psychiatry*.1969; 20:598-604.
5. Foster G, Shakespeare R and Chinemana F. Orphan Prevalence and Extended Family Care in a Peri-urban Community in Zimbabwe. *AIDS Care*.1995;7:3-17.
6. Lloyd CB and Blanc AK. Children's Schooling in Sub-Saharan Africa: The Role of Fathers, Mothers, and Others. *Population and Development*.1996; 22 (2): 265-98.
7. Rutter M. Children of Sick Parents. An Environmental and Psychiatric Study. Oxford University Press 1966.
8. Wolff PH, Tesfai B. and Egasso, H. "A comparison study. *J. Child Psychology, Psychiatry*.1995;36: 633-44.
9. Hasanovic M, Sinanovic O, Pavlovic S. Acculturation and psychological problems of adolescents from Bosnia and Herzegovina during exile and repatriation. *Croat Med J*.2005; 46: 105-15.
10. Freud A, Danns S. An experiment in-group upbringing. *Psychoanalytical Study Child*.1951; 6: 127-68.
11. Rutter M. and Maughan B. Psychosocial adversities in childhood and adult psychopathology. *J. Personality Disorders*.1997;11:7-18.
12. Tizard B. and Hodges J. The effect of early institutional rearing on the development of eight year old children. *J. Child Psychology Psychiatry*.1978;19:99-118.
13. McFarlane AH, Bellissimo A and Norman GR. Family structure, family functioning and adolescent well being: the transcendent influence of parental style. *J. Child Psychology Psychiatry*.1998; 36: 847-64.
14. Margoob MA. The Pattern of child psychiatric disorders in Kashmir. *JK Practitioner* 1996; 3: 4, 233-236.
15. Rahman W, Mullick MSI, Pathan MA, Prevalence of Behavioral and Emotional Disorders among the Orphans and Factors Associated with these Disorders. *BSMMU J* 2012; 5(1):29-34.
16. Zohra, S, Lassi. Behavioral problems among children living in orphanage

- facilities of Karachi, Pakistan: comparison of children in an SOS Village with those in conventional orphanages. *Social Psychiatry Epidemiology*.2011.10.1007/s00127-010-0248-5.
17. Koumi MA, Ali YF, Ismail. Psychiatric morbidity among a sample of orphanage children in Cairo. *International Journal of Pediatrics*.2012.
 18. Nagy F and Amira F. Psychosocial and Developmental Status of Orphanage Children. *Epidemiological Study Current Psychiatry*2010; 2: 41-48.
 19. Ehrenreich JT, Santucci LC, Weiner CL Separation Anxiety Disorder in Youth: Phenomenology, Assessment, and Treatment. *Psicol Conductual* 2008;16 : 389–412.
 20. Margoob MA and Rather Y. Psychiatric morbidity among children in orphanages - experience from Kashmir. *JK-Practitioner* 2006;13:53-55.
 21. Karadag O, Aman C and Zcebe OH. Adolescents living in orphanages in Ankara: psychological symptoms, level of physical activity, and associated factors, *Turk Psikiyatri Dergisi*.2011; 22: 93–103.
 22. Pincus HA, Tanielian TL and Marcus SC. Prescribing trends in psychotropic medications, primary care, psychiatry and other medical specialties. *JAMA*. 2007; 279: 526-531.
 23. Degonda M, Wyss M, Angst J. The Zurich Study. XVIII. Obsessive-compulsive disorders and syndromes in the general population. *European Arch Psychiatry Clinical Neurosciences*. 1993;243:16–22.
 24. Karno M, Golding J, Sorensen S, Burnam A. The epidemiology of obsessive-compulsive disorder in five U.S. communities. *Arch Gen Psychiatry*. 1988;45:1094–9.
 25. Adam BL, John P. Kaplan & Sadock's Comprehensive textbook of Psychiatry ninth edition .Pages 3671-3674.
 26. Jaisoorya TS, Reddy YC, Srinath S, Kandavel T. Gender differences in Indian patients with obsessive-compulsive disorder. *Comprehensive Psychiatry*. 2008;50:70–5.
 27. Flament MF, Cohen D. Child and adolescent obsessive-compulsive disorder. In: Maj M, Sartorius N, Okasha A, Zohar J, editors. *Obsessive-Compulsive Disorder*. WPA Series on Evidence and Experience in Psychiatry. JohnWiley and Sons Ltd; 2002. pp. 147–83.
 28. Cavedo LC, Parker G. Parental bonding instrument. Exploring for links between scores and obsessionality. *Social Psychiatry Epidemiology*.1994; 29:78–82.
 29. Alonso P, Menchon JM, Mataix-Cols D, Pifarre J, Urretavizcaya M, Crespo JM., Jimenez S, Vallejo G, Vallejo J. (2004) Perceived parental rearing style in obsessive-compulsive disorder: relation to symptom dimensions. *Psychiatry Res* 127:267–278.
 30. Doron G, Gothelf A, Aharonovsky O, Horesh N, Carty T. Life events and personality factors in children and adolescents with obsessive-compulsive disorder and other anxiety disorders. *Comprehensive Psychiatry*. 2004;45: (3)192–198.
 31. Abramowitz JS, Deacon BJ, Woods CM, Tolin DF. Association between protestant religiosity and obsessive-compulsive symptoms and cognitions. *Depress Anxiety J*.2004; 20:70–76.
 32. Tek C, Ulug B. Religiosity and religious obsessions in obsessive-compulsive disorder. *Psychiatry Res*. 2001;104:99–108.
 33. Assarian F, Biqam H, Asqarnejad A. An epidemiological study of obsessive-compulsive disorder among high school students and its relationship with religious attitudes. *Arch Iran Med* 2006;9:104–07.
 34. Malhi P, Singhi P. Spectrum of attention deficit hyperactivity disorders in children among referrals to psychology services. *Indian Pediatrics J*. 2000; 37(11):1256-60.
 35. Venkata JA and Anuja S. Prevalence of Attention Deficit Hyperactivity Disorder in primary school children.

- Indian J Psychiatry. 2013; 55(4): 338–342.
36. Pine DS, Cohen P, Gurley D, Brook J. The risk for early adulthood anxiety and depressive disorders in adolescents with anxiety and depressive disorders. Arch Gen Psychiatry 1998; 55:56-64.
37. Heidi B, Ellis S, Philip A. Predictors of Disruptive Behavior, Developmental Delays, Anxiety, and Affective Symptomatology among Institutionally Reared Romanian Children. Journal of the American Academy of Child & Adolescent Psychiatry .2004; 43:1283–1292.
38. Chaudhuri AR. The Changing Aspirations of Kashmiri Youth. Kashmir Lit-Online Journal of Kashmiri and Diasporic Writing. [Internet]. 2013. Available from www.kashmirlit.org/2013-archive.

How to cite this article: Maqbool Dar M, Hussain SK, Qadri S et al. Prevalence and pattern of psychiatric morbidity among children living in orphanages of Kashmir. Int J Health Sci Res. 2015; 5(11):53-60.

International Journal of Health Sciences & Research (IJHSR)

Publish your work in this journal

The International Journal of Health Sciences & Research is a multidisciplinary indexed open access double-blind peer-reviewed international journal that publishes original research articles from all areas of health sciences and allied branches. This monthly journal is characterised by rapid publication of reviews, original research and case reports across all the fields of health sciences. The details of journal are available on its official website (www.ijhsr.org).

Submit your manuscript by email: editor.ijhsr@gmail.com OR editor.ijhsr@yahoo.com