

# A Cross Sectional Study on Behavioural Pattern and Its Association with Various Factors among Children Living in Orphanages in Chitradurga, Karnataka, India

Mayuri Reddy Reddy<sup>1</sup>, Sameeya Furmeen Salam<sup>2</sup>

<sup>1</sup>Associate Professor, Dept of Community Medicine, Bhaskar Medical College, Hyderabad, Telangana, India, <sup>2</sup>Senior Assistant Professor, Department of Community Medicine, Government Stanley Medical College & Hospital, Chennai, Tamil Nadu.

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## Abstract

**Background:** Orphans are the most underprivileged groups in each society. Children who live in orphanage have significantly higher rates of growth and development problems, serious mental health problems, and difficulties accessing health services. Therefore, there is a need to address the needs of this vulnerable group. This study was conducted with the objective to assess the behavioral pattern of children and its association with various factors in the orphanage.

**Methods:** A Cross Sectional Study was conducted among orphanage children for a period of one year and a total of 297 children between the ages of 6-16 years were included in the study. Their behaviour pattern was assessed using the Strength and Difficulties Questionnaire (SDQ) scale devised by Goodman which includes emotional symptoms, conduct problems, hyperactivity, peer problems and pro social behavior. Data was analyzed using the SPSS version 20.

**Conclusion:** The study revealed that among the various behavioral problems, Peer problems (68.4%) were most frequently reported, followed by Conduct problems (33.7%). The results also shown that the association between child's age and emotional problems was statistically significant at F value (1.819), p value (0.05) as the age advances the child has more emotional problems.

**Key Words:** behavioral problem; conduct problem; orphans; orphanage.

## Introduction

According to UNICEF the definition of an orphan is anyone between the ages of 0 and 17 years

who has lost at least one parent or both the parents.<sup>1</sup> Vulnerable children are those who belong to high-risk groups who lack access to basic social amenities

**Corresponding Author:** Sameeya Furmeen Salam, Senior Assistant Professor, Department of Community Medicine, Government Stanley Medical College & Hospital, Chennai -600001. Tamil Nadu.

**E-mail:** sfurmeen@gmail.com

**Mobile No:** +91 9003142549

or facilities. They include street children, orphans, child prisoners, child laborers, the children of sex workers and children who are orphaned by AIDS or have an HIV-positive parent<sup>2</sup>. Orphan-hood is frequently accompanied with multidimensional problems including prejudice, reduced access to health and school services, inadequate food, sexual abuse and others.<sup>3</sup> A large proportion of delinquent and neglected children come from broken homes. Desertion, divorce, illegitimacy, cruelty, drunkenness and drug abuse by the parents are some of the common denominators among the neglected children.<sup>4</sup> The death of one or both parents has a profound and lifelong impact on the psychological wellbeing of children.<sup>5</sup> Behavioral and emotional consequences are the two challenging aspects in children reared in orphanages. Some studies reported that children reared in the institutional environment have more maladaptive and atypical behaviors lower on the competence scale and social relatedness scale than community counterparts.<sup>6</sup> In view of these aspects the present study was undertaken to assess the behavioral pattern of children and its association with various factors in the orphanage.

### Materials and Methods

A cross-sectional institution-based study was conducted in all the orphanages registered with the Department of Women and Child Welfare, Chitradurga. After taking institutional ethical clearance, various orphanages were visited. Those who gave permission were included in the study. Children in the age group of 6-16 years who were available at the time of visit participated in the study. Complete enumeration was done and 297 children were the study participants. Children with mental retardation and neurological disorders that affect cognition and behavior were excluded from the study. Study duration was one year.

By using pre-designed, pre-structured questionnaire, socio demographic profile and their behaviour pattern were assessed. Assessment of behavior was done using the Strength and Difficulties Questionnaire (SDQ) devised by Goodman.<sup>7,8,9</sup> The questionnaire contains 25 items designed to assess the strength namely pro social behaviour and the difficulties namely emotional symptoms, conduct

problems, hyperactivity and peer problems. The teacher or warden taking care of the child was asked to do scoring of the questionnaire based on the child's behavior over the last six months. The questionnaire was devised in the local language for better interpretation by the teachers. Based on the scores, the child's behavior was classified as normal, borderline and abnormal with respect to total difficulties and each of the five scales, which includes emotional symptoms, conduct problems, hyperactivity, peer problems and pro social behaviour. Pilot study was conducted before starting data collection to identify problems in the research design, validity of the study, and final modifications were made after the pilot study. Data entry and analysis was done by using SPSS Package version 20. Simple proportions mean, standard deviation, and multivariate analysis was applied to find the various factors associated with behavioral problems

### Results and Discussion

A total of 297 children were taken during the study period. In our study majority of children were between the ages of 14-16 years (37.7%). The mean age of study subjects was  $12.15 \pm 2.5$  years. Most of the children were males (80.5%) and Hindu by religion (83%). Almost 55% of the children were paternal orphans, entered orphanage after 5 years (92.3%). The main reason for children taking admission into orphanage was economical causes (62.6 %) and staying in orphanage since 3 years. More than 70% of the children were going to government schools and studying in high school (37.7 %).

By using SDQ questionnaire, behavioral patterns of children were assessed. Emotional problems scores of most the children's fell under the category of normal (91.9%) followed by borderline (1.3%) and abnormal (6.7%). Emotional symptoms includes child having many worries, fears, often unhappy and easily scared. With regard to conduct problems most of the children's scores fell under the category of normal (58.6%) followed by abnormal (33.7%) and border line (7.7 %). The Conduct problems includes the child often has temper tantrums, fights with other children, lies and steals from home, schools or elsewhere. The hyperactivity scores of most of the children fell under the category of normal (78.5%) which includes the

child is restless, overactive, constantly fidgeting, easily distracted. Most of the children had abnormal scores (68.4%) with peer problems followed by borderline (23.2%) and normal scores (8.4%). It include the child tends to play alone, has at least one good friend, gets on better with adults than with other children. Pro social behavior of most of the children's scores fell under the category of normal (95.3%). It includes the child readily shares with other children, considerate of other people's feelings, kind to younger children, often volunteers to help others.( Table 1)

In our study Peer problems were most frequently reported among children followed by Conduct problems. Scores on Total difficulties were evenly distributed across normal, borderline, and abnormal range where as Emotional, Hyper activity, Pro social scales generally fell in normal range . Similar to our study in a study conducted by Solomon WorkuAgaje in Ethiopia depicts that the child's behavioral scores were evenly distributed across normal, borderline, and abnormal symptoms in the total difficulties scale with 34.5%, 30.4%, and 35.1% respectively.<sup>10</sup> In a study conducted by Tess Lang et al Peer problems were most frequently reported, followed by emotional and hyperactivity problems. Scores on the Conduct scale generally fell in the "normal" range and Pro-social behaviors were mostly in the normal to borderline range.<sup>11</sup>

A multivariate analysis was done to find the various factors (age, duration of stay in orphanage, family contact with child and type of vulnerability ) associated with EmotionalProblems, Conduct problems, Hyper activity, Peer problems, Pro social behavior and Total difficulties.

In Table 2 the association between Emotional problems and various independent variables like age, duration of stay in orphanage, family contact with child and type of vulnerability ( single orphan, double orphan or child with living parent ) was assessed. The association between child's age and emotional problems was statistically significant at F value (1.819), p value (0.05). Younger and older

children were significantly different with emotional problems. As the age advances the child has more emotional problems. This may be because the younger children get adjust more easily to the care of non parents than older children. Similarly in a study conducted by Solomon WorkuAgaje revealed that there was significant age difference on the emotional symptoms,  $F=6.83$ ,  $P < 0.01$ .<sup>10</sup>

From table 3, independent variables like child age ( F value = 1.955; p value = 0.041 ) and family contact with the child ( F value = 3.286; p value = 0.04) showed positive association with hyper activity. It is to be noted that family contacts play a vital role in shaping the psyche of children who reared in orphanages, more the contacts lesser will be the behavioral problems among them and vice versa. In the present study the same holds true as most of the children with hyper activity rarely had any contacts with their families. Similar observations were seen by Suma Narayana Reddy in her study. The proportion of disturbed children among those who had family contacts was much less than those who had regular contacts.<sup>12</sup>

From table 4, the independent variable i.e. Type of vulnerability showed positive correlation with Pro social Behavior. ( F value = 4.022; p value = 0.02). It was observed that double orphans had more abnormal scores than single orphans, or child with living parent with respect to Pro social Behavior

It is shown from table 5 that the independent variables like child age ( F value = 2.133; p value = 0.024 ) and duration of stay in the orphanage ( F value = 4.551; p value = 0.012 ) showed positive association with Total difficulties. Most of the abnormal scores were seen among children who were staying in orphanage for more than 5 years. Similar findings were also observed by Solomon WorkuAgaje, Dyregrovin their studies.<sup>10, 13</sup>

In contrast to these findings our study did not find any significant association among various factors with conduct problems and peer problems

**Table 1: Distribution of respondents according to their behavioral pattern**

Sno	Behavior pattern	Normal No (%)	Border Line No (%)	Abnormal No (%)
1	Emotional Symptoms	273 (91.9%)	4(1.3%)	20(6.7%)
2	Conduct Problems	174 (58.6)	23(7.7)	100 (33.7)
3	Hyperactivity	233 (78.5)	48(16.2)	16(5.4)
4	Peer Problems	25(8.4)	69(23.2)	203(68.4)
5	Pro Social Behavior	283(95.3)	8(2.7)	6(2)
	Total behavioral difficulties	96(32.3)	116(39.1)	85(28.6)
Total		297 (100)	297 (100)	297 (100)

**Table 2: Multivariate analysis of various factors associated with Emotional Problems**

Characteristics	Multivariate Analysis			
	df	Mean Square	F value	P value
Age	10	0.367	1.819	0.05
Duration of stay	2	0.07	0.349	0.706
Contacts with family	2	0.266	1.319	0.27
Type of vulnerability	2	0.356	1.767	0.174

**Note: Dependent variable: Emotional problems**

**Table 3: Multivariate analysis of various factors associated with Hyperactivity**

Characteristics	Multivariate Analysis			
	df	Mean Square	F value	P value
Age	10	0.614	1.955	0.041
Duration of stay	2	0.267	0.851	0.429
Contacts with family	2	1.032	3.286	0.04
Type of vulnerability	2	0.248	0.788	0.456

**Note: Dependent variable: Hyperactivity**

**Table 4: Multivariate analysis of various factors associated with Pro social behavior**

Characteristics	Multivariate Analysis			
	df	Mean Square	F value	P value
Age	10	0.066	0.69	0.733
Duration of stay	2	0.02	0.212	0.809
Contacts with family	2	0.044	0.46	0.632
Type of vulnerability	2	0.384	4.022	0.02

**Note: Dependent variable: Pro social Behavior**

**Table 5: Multivariate analysis of various factors associated with Total difficulties**

Characteristics	Multivariate Analysis			
	df	Mean Square	F value	P value
Age	10	1.052	2.133	0.024
Duration of stay	2	2.245	4.551	0.012
Contacts with family	2	0.039	0.078	0.925
Type of vulnerability	2	0.408	0.827	0.439

**Note: Dependent variable: Total difficulties**

### Conclusions

The study revealed that, among various behavioral problems Peer problems were most frequently reported in children followed by conduct problems, where as emotional, hyper activity and pro social scales generally fell in normal range.

The association of various factors with behavioural pattern of children were assessed. The association between child's age and emotional problems was statistically significant, as the age advances the child has more emotional problems. Type of vulnerability showed positive correlation with Pro social Behavior. It was observed that double orphans had more abnormal scores than single orphans, or child with living parent with respect to Pro social Behavior. The association between child age and duration of stay in the orphanage showed positive association with Total difficulties. Most of the abnormal scores were seen among children who were staying in orphanage for more than 5 years.

Our study did not find any significant association among various factors with conduct problems and peer problems.

### Recommendations:

Majority of these children start their lives with the disadvantage of parental deprivation. Hence a comprehensive and integrated approach involving the caretakers, teachers, social workers, community volunteers and even parents wherever applicable should be developed to nurture these children. Child guidance clinics can be started in the orphanages. Specialists' visits with child psychologists could be helpful to address the behavioral problems in children at the earliest.

### Limitations:

As the study was based on the perspective of caregiver; subjective bias is the limitation of our study.

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