

Evaluation of Anxiety and Depression Among Orphan and Non-Orphan Adolescents in a Rural Residential School of Maharashtra

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ABSTRACT

Background: Adolescence marks a critical stage of development characterized by profound physical, emotional, and social changes. This study explores the prevalence of anxiety and depression among orphan and non-orphan adolescents in a rural residential school setting, aiming to identify associated factors. **Method:** A community-based cross-sectional descriptive study was conducted among 100 adolescents (50 orphans and 50 non-orphans) aged 10-19 years in Warudi, Jalna from August 10 to October 10, 2022. Institutional ethical approval and written informed consent were obtained. Data collection included DSM-5 criteria for anxiety and depression assessment, using the Hamilton Anxiety Rating Scale (HAM-A) and Hamilton Depression Rating Scale (HDRS). Additional parameters assessed were sleep disturbances, academic performance, social interactions, duration of stay in the residential school, and type of orphanhood. Statistical analysis was performed using SPSS version 21, with qualitative parameters presented as percentages and the chi-square test used for comparisons ($p < 0.05$ considered significant). **Result:** The study revealed notable disparities in mental health outcomes between orphan and non-orphan adolescents. Orphans, predominantly categorized as double orphans (54%), exhibited higher prevalence rates of anxiety (46%) and depression (30%) compared to non-orphans (anxiety 14%, depression 12%). Factors such as prolonged stays in residential schools and the duration of orphanhood were significantly associated with heightened levels of anxiety and depression among orphans. **Conclusion:** Orphan adolescents residing in rural residential school face significantly

elevated risks of anxiety and depression compared to their non-orphan peers. The findings highlight the urgent need for targeted psychological support and interventions tailored to the unique challenges of orphanhood, including the prolonged institutional care and the emotional impact of parental loss. Future research should focus on longitudinal studies to assess the effectiveness of interventions and track mental health trajectories over time.

KEYWORDS: Psychiatric Problems, Loss of parents, Support, India, Adolescent Health

INTRODUCTION

Adolescence signifies a critical stage of development marked by significant physical, emotional, and social changes. [1] During adolescence, several factors can increase susceptibility to mental health problems. These include societal demands for achievement and compliance, worries about appearance and gender roles, academic stress, and experiences of grief or trauma. Importantly, losing parents can be a profoundly distressing event, causing young people to feel isolated, unsure, and at risk of anxiety, depression, and other mental health challenges. [2]

The World Health Organization (WHO) highlights that globally, one in seven 10-19-year-olds experiences a mental disorder, accounting for 13% of the global burden of disease in this age group. Depression, anxiety, and behavioral disorders are among the leading causes of illness and disability among adolescents. [3] Adolescents with mental health conditions are particularly vulnerable

to social exclusion, discrimination, and stigma, which affect their readiness to seek help and exacerbate educational difficulties and risk-taking behaviors. [3]

UNICEF defines an orphan as a child under 18 years of age who has lost one or both parents to any cause of death. Orphans are classified into three categories: paternal orphans (loss of father), maternal orphans (loss of mother), and double orphans (loss of both parents). [4] Stressful experiences can damage their personalities and affect interpersonal relationships. [5, 6]

Anxiety, characterized by tension, worried thoughts, and physical changes like increased blood pressure, differs from fear, which is a short-lived response to a specific threat. [7] Depression among orphans can occur from inadequate care and support during the grieving process, poor living conditions, and fear about the future. [8, 9] The absence of family's love and care makes orphans prone to behavioral and emotional problems compared to non-orphans. [10, 11]

This study aims to assess the prevalence of anxiety and depression among orphan and non-orphan adolescents in a rural residential school and to identify associated factors.

MATERIAL AND METHODS

Study Design: A community-based cross-sectional descriptive study.

Population: Orphans and non-orphan adolescents aged 10-19 years from a residential school in Warudi, Tq. Badnapur, Dist. Jalna.

Duration: The study was conducted from August 10 to October 10, 2022.

Ethical Considerations: Institutional ethical committee approval was obtained. Written informed consent was secured from all participants and their guardians.

Sample Size: Data were collected from 100 adolescents (50 orphans and 50 non-orphans).

Inclusion Criteria: All orphans and non-orphans aged 10-19 years willing to participate and who provided consent.

Exclusion Criteria: Adolescents who did not consent to participate.

Data Collection: Participants were assessed using the DSM-5 criteria for anxiety and depression. The Hamilton Anxiety Rating Scale (HAM-A) and Hamilton Depression Rating Scale (HDRS) were employed to measure anxiety and depression, respectively. Additional parameters assessed included sleep disturbances, academic performance, social interactions, duration of stay in the residential school, and type of orphanhood.

Statistical Analysis: Data were entered into Microsoft Excel 2016 and analyzed using SPSS version 21. Qualitative parameters were depicted as percentages, and the chi-square test was used to compare results. A p-value of <0.05

was considered statistically significant.

RESULTS

The study included 100 male adolescents (50 orphans and 50 non-orphans). The age distribution, duration of stay in the residential school, and type of orphans are shown in Table 1.

Category	Orphans (N=50)	Non-Orphans (N=50)
Age Range (Years)		
10-13	23 (46%)	20 (40%)
14-16	22 (44%)	21 (42%)
17-19	5 (10%)	9 (18%)
Duration of Stay (Years)		
<5 years	15 (30%)	29 (58%)
5-10 years	27 (54%)	18 (36%)
>10 years	8 (16%)	3 (6%)
Type of Orphan		
Maternal Orphan	14 (28%)	-
Paternal Orphan	9 (18%)	-
Double Orphan	27 (54%)	-

Table 1: Demographics of Orphan and Non-Orphan Children

The majority of orphans (54%) had been in the residential school for 5-10 years, compared to 36% of non-orphans. Only 6% of non-orphans had stayed for more than 10 years, while 16% of orphans had. Most orphans were double orphans (54%).

Anxiety was significantly higher among orphans compared to non-orphans. Depression was also significantly higher among orphans compared to non-orphans. Table 2

Type of orphan was not significantly associated with anxiety, whereas duration of stay in the residential school and duration of orphanhood were significantly associated with anxiety levels. Table 3

Similar to anxiety, type of orphan was not significantly associated with depression. However, duration of stay in the residential school and duration of orphanhood were significantly associated with depression levels. Table 4

Characteristic	Category	Anxiety Present	Anxiety Absent	p-value
Type of Orphan	Maternal Orphan	7 (14%)	7 (14%)	$\chi^2=0.114$, df=2, p=0.94
	Paternal Orphan	4 (8%)	5 (10%)	
	Double Orphan	12 (24%)	15 (30%)	
Duration of Stay	<5 years	6 (12%)	9 (18%)	$\chi^2=11.35$, df=2, p=0.003
	5-10 years	9 (18%)	18 (36%)	
	>10 years	8 (16%)	0 (0%)	
Duration of Orphanhood	<5 years	6 (12%)	12 (24%)	$\chi^2=19.05$, df=2, p<0.0001
	6-10 years	10 (20%)	15 (30%)	
	11-15 years	7 (14%)	0 (0%)	

Table 3: Factors Associated with Anxiety Among Orphan Children (N=50)

Characteristics	Category	Depression Present	Depression Absent	p-value
Type of Orphan	Maternal Orphan	4 (8%)	10 (20%)	$\chi^2=0.125$, df=2, p=0.93
	Paternal Orphan	3 (6%)	6 (12%)	
	Double Orphan	8 (16%)	19 (38%)	
Duration of Stay	<5 years	2 (4%)	13 (26%)	$\chi^2=15.79$, df=2, p<0.001
	5-10 years	5 (10%)	22 (44%)	
	>10 years	8 (16%)	0 (0%)	
Duration of Orphanhood	<5 years	3 (6%)	15 (30%)	$\chi^2=18.47$, df=2, p<0.0001
	6-10 years	5 (10%)	20 (40%)	
	11-15 years	7 (14%)	0 (0%)	

Table 4: Factors Associated with Depression Among Orphan Children (N=50)

DISCUSSION

The results of this study indicate a significant disparity in mental health outcomes between orphan and non-orphan adolescents residing in a rural residential school. Specifically, the data highlight higher prevalence rates of anxiety and depression among orphan adolescents compared to non-orphan adolescents.

The prevalence of anxiety among orphans was found to be 46%, with varying degrees of severity, compared to 14% in non-orphans. Similarly, the prevalence of depression among orphans was 30%, compared to 12% in non-orphans. These findings are consistent with previous research indicating that orphans are more susceptible to mental health problems due to the loss of parental support and the subsequent emotional and social challenges.^[2, 4, 9-12] Orphans are more prone to psychiatric illnesses such as depression, anxiety, PTSD, and behavioral problems, as highlighted in a comprehensive review by Kalpana.^[13] Additionally, studies con-

ducted by Sahad et al. corroborate the findings that orphans had significantly higher levels of mental health problems, including depression, anxiety, and stress, compared to non-orphans in Malaysia.^[14]

Table 3 show that a significant number of orphans (54%) have stayed in residential schools for 5-10 years, and 16% for more than 10 years. In contrast, 58% of non-orphans have stayed for less than 5 years. The extended duration of stay among orphans could be attributed to the lack of alternative familial support systems, making them more reliant on institutional care. This prolonged stay might contribute to higher levels of anxiety and depression as institutional settings often lack the emotional warmth and personalized care that family environments provide. The study by Ramagopal et al. supports these findings, noting that the prevalence of depression among children living in orphanages is significantly high due to the lack of familial emotional support and stability.^[15] Additionally, Kaur et al. found that behavioral and emotional problems are prevalent

Mental Health Condition	Orphans (N=50)	Non-Orphans (N=50)	p-value
Anxiety	23 (46%)	7 (14%)	<0.05
Severity (Anxiety)			
Mild	14 (28%)	4 (8%)	
Moderate	6 (12%)	3 (6%)	
Severe	3 (6%)	0 (0%)	
Depression	15 (30%)	6 (12%)	<0.05
Severity (Depression)			
Mild	8 (16%)	4 (8%)	
Moderate	3 (6%)	2 (4%)	
Severe	4 (8%)	0 (0%)	

Table 2: Mental Health Condition Among Orphan and non-orphan Children (N=100)

among orphans and other vulnerable children in institutional homes, which could further exacerbate their mental health issues.^[9]

The study reveals that double orphans, who have lost both parents, exhibit higher rates of anxiety (24%) and depression (16%) compared to single orphans. Maternal orphans show 14% anxiety and 8% depression, while paternal orphans exhibit 8% anxiety and 6% depression. This suggests that the complete absence of parental care significantly exacerbates mental health issues among adolescents, highlighting the critical role of parental figures in providing emotional stability and support. These findings align with previous research indicating that the loss of both parents makes children at a greater risk of developing mental health problems compared to the loss of a single parent.^[3, 14]

Several factors significantly associated with anxiety and depression among orphan adolescents were identified. The study indicates that longer stays in residential schools are associated with higher anxiety and depression levels. Orphans staying for more than 10 years showed 16% anxiety and 16% depression, indicating that prolonged institutional care might adversely affect mental health.^[10] Additionally, the length of time since becoming orphaned also significantly impacts mental health. Orphans who have been orphaned for 11-15 years exhibit the highest rates of anxiety (14%) and depression (14%). This suggests that the cumulative effect of prolonged parental absence intensifies emotional distress.^[8] Tadesse et al. also noted that psychosocial well-being of orphan and vulnerable children is significantly impacted in orphanages, further supporting these findings.^[11]

Gender differences in mental health outcomes were also notable. Previous studies have shown that female orphans are significantly more likely to experience depression compared to male orphans. For instance, a study conducted in Dakahlia governorate, Egypt, revealed that girls were about 46 times more likely to have depression than boys, indicating a pronounced gender disparity in mental health outcomes among orphans.^[16] Bhatt et al. found similar gender disparities in depressive symptoms among orphans in Nepal, highlighting the need for gender-specific interventions.^[10]

CONCLUSION

The study reveals that orphan adolescents exhibit significantly higher levels of anxiety and depression compared to their non-orphan counterparts. Factors such as the duration of stay in the residential school and the length of orphanhood are significantly associated with the prevalence of these mental health issues. The findings underscore the need for targeted psychological support and interventions for orphans to address and mitigate anxiety and depression.

The findings underscore the need for targeted mental health interventions for orphans, particularly those in long-term institutional care. Strategies to mitigate anxiety and depression could include providing regular psychological counseling and therapy sessions to address emotional and mental health needs. Enhancing the quality of care in residential schools by training caregivers in child psychology and emotional support is also crucial. Encouraging community-based care and integration into extended family systems to provide orphans with a sense of belonging and stability is another vital strategy.

The significant differences in mental health outcomes between orphans and non-orphans highlight the importance of tailored interventions to support orphaned adolescents. Future research should focus on longitudinal studies to track mental health outcomes over time and evaluate the effectiveness of different intervention strategies.

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