

PREVALENCE OF PSYCHIATRIC ILLNESS AND ITS RELATIONSHIP WITH DELINQUENT BEHAVIOUR- A STUDY AMONG INSTITUTIONALISED CHILDREN

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ABSTRACT

BACKGROUND

Psychiatric disorders are common during childhood and adolescence. Studies have shown that behavioural problems and psychiatric morbidity are high among children placed in institutionalised settings and higher rates of delinquent behaviours were shown by children with psychiatric illness.

Aims-

1. To find out the prevalence of Psychiatric illness among inmates of orphanages.
2. To find out the relationship between Psychiatric illness and delinquent behaviour among inmates of orphanages.

MATERIALS AND METHODS

A cross-sectional study with a predetermined convenient sample size of 100 children and adolescents from orphanages in Kerala. Chi-square test is used for statistical analysis.

RESULTS

Of the 100 children assessed, 11 children were found to have Psychiatric illness. Among the 11 children, 3 children were suffering from emotional disorder; 2 each were suffering from behavioural disorder and developmental disorder and 6 children were suffering from substance use disorder. Substance use disorder was found to be a comorbidity. 12.3% of boys and 8.6% of girls were having psychiatric illness. Delinquent behaviours were found in 10 children. Among the 10 children who were having delinquent behaviour, 5 children (50%) were suffering from psychiatric illness. Among the 90 children who were not showing delinquent behaviour, 6 children (6.7%) were suffering from psychiatric illness. Statistical analysis was done using Chi-Square test and it was found that there is a significant difference in the psychiatric morbidity among children with delinquent behaviour compared to children without delinquent behaviour.

CONCLUSION

The inmates of orphanages suffer from a variety of mental health disorders. Delinquent behaviours were found among children living in orphanages. There was a significant difference in the psychiatric morbidity between children with or without delinquent behaviour.

KEYWORDS

Psychiatric Illness, Delinquent Behaviour, Orphanages.

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BACKGROUND

Psychiatric disorders are common during childhood and adolescence. Studies by Humphreys et al,¹ Jozefiak et al² and Ståhlberg et al³ have shown that behavioural problems and psychiatric morbidity are high among children placed in institutionalised settings. Musisi et al⁴ conducted a comparative study on behavioural and emotional disorders of primary school-going orphans and non-orphans in Uganda. In this study, problem behaviours were seen in 45.1% of orphan children compared to 36.5% of non-orphan children. Bullying of other children and lying was found more in orphans. 13% of orphans were involved in bullying compared with 10.6% of non-orphan children.

Other delinquent behaviours such as stealing things, destruction of property, truancy and frequent fights with other children were found more among non-orphan children, 72 of the 197 orphans and 49 of the 164 non-orphans were found to have psychiatric morbidity.

Elkington et al⁵ and Silva et al⁶ studied the relationship between delinquent behaviour and psychiatric illness and found higher rates of delinquent behaviours among children with psychiatric illness. Elkington et al⁴ conducted a longitudinal study to identify the prevalence of violence and the relationships between psychiatric disorders and violence among delinquent males and females, found that 34.6% of males and 19.8% of females had history of violence. 43.9% of males and 28.8% of females were violent in the subsample of people who were having psychiatric illness. The prevalence of violence in the subsample with no psychiatric disorder was 24.7% in males and 10.3% in females. Silva et al⁶ conducted a population study in Australia, found that 8% boys and 3% girls with Attention Deficit Hyperactivity Disorder had a community correction record. When compared Attention Deficit Hyperactivity Disorder children with children with no features of Attention Deficit Hyperactivity Disorder, it was found that boys with Attention Deficit Hyperactivity Disorder

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were two and half times and girls with Attention Deficit Hyperactivity Disorder were nearly three times more likely to have a community correction record.

Kaylor et al⁷ studied the behaviours of youth involved in the child welfare system found that older children were more likely to engage in delinquent behaviours than younger children. Boys were more likely to engage in delinquent behaviours than girls and children who were physically abused had more chance to engage in delinquent behaviours. They also found that increases in caregiver monitoring and good quality of relationship with caregivers were associated with decreases in delinquent behaviour.

The concept of the term juvenile delinquency is difficult to be stated. It has different meanings in different settings. Bartol and Bartol⁸ defined juvenile delinquency as "a behaviour against the criminal code committed by an individual who has not reached adulthood, as defined by state or federal law" (p. 139). According to them, delinquency is an imprecise, nebulous, social, clinical and legal label for a wide variety of law and norm violating behaviours.

As per the crime statistics in India,⁹ in the year of 2015, around 31000 juveniles were reported to be involved in conflict with law. This accounts approximately 1.1% of total cognisable crimes.

Psychiatrists usually diagnose the delinquent behaviours as part of conduct disorder or antisocial personality disorder. Children may get involved in delinquent behaviours such as theft as part of psychiatric disorders like Kleptomania. Adolescent children with manic episode may present with conduct symptoms. It is important to identify why a particular child is involving in a particular kind of behaviour in a particular situation. The interventions should be different if the delinquent behaviour occurs as a part of psychiatric illness.

Aims

1. To find out the prevalence of Psychiatric illness among inmates of orphanages.
2. To find out the relationship between Psychiatric illness and delinquent behaviour among inmates of orphanages.

Objectives

1. To identify the prevalence of Psychiatric illness among inmates of orphanages.
2. To identify the types of Psychiatric illness among inmates of orphanages.
3. To identify the gender difference in Psychiatric illness among inmates of orphanages.
4. To identify the prevalence of delinquent behaviour among inmates of orphanages.
5. To identify whether there is any relation between Psychiatric illness and delinquent behaviour among inmates of orphanages.

MATERIALS AND METHODS

Study Design

Cross-sectional study.

Sample- The sample consists of 100 children and adolescents from orphanages in Kerala. Sample size is decided to be of 100 children for convenience.

Tools

- a. Personal data sheet- developed by the investigator.
- b. Informal interview with children to assess delinquent behaviour.
- c. Standard clinical interview to assess Psychiatric morbidity.
- d. International Classification of Diseases -10 to diagnose Psychiatric illness.

Study Period

Between November 2013 and May 2017

Tool Description

Personal data sheet: - Developed by the investigator to collect the personal details of the sample. The items in the personal data sheets were name, age, gender, place of residence, history of delinquent behaviour, history of any substance use and history of psychiatric illness. ICD-10 classification of Mental and behavioural Disorders, Clinical descriptions and diagnostic guidelines which is a publication of World Health Organization is used to diagnose psychiatric illness.

Procedure

The Board of Control for Orphanages and other Charitable Homes in Kerala has been established as per State Government Gazette for the supervision and control of Homes in the State. There are 1205 registered orphanages in the state of Kerala with a sanctioned strength of 83716 inmates. The number of inmates in these homes were fifty-two thousand two hundred and ninety-two.¹⁰ After getting ethical clearance, three orphanages were selected randomly from the list of orphanages recognised by the control board under the social justice department of Kerala.

Inclusion Criteria

Children between 07 years to 18 years of age were included in the study.

Exclusion Criteria

Inmates below the age of 7 and above the age of 18 were excluded.

Data Collection

All the inmates in the age group of 7 -18 years of the two orphanages which were visited initially by the investigator and who gave consent to participate were included for the study. Children were selected randomly from the third orphanage to complete the predetermined sample size of 100. Personal data of children was collected using a personal data sheet. The investigator interviewed each of the participant individually to assess delinquent behaviour and psychopathology. Psychiatric disorders were diagnosed based on ICD-10. Chi-square test is used for statistical analysis.

RESULTS

Out of the 100 children assessed, 11 children were found to have Psychiatric illness. Among the 11 children, 3 children were suffering from emotional disorder, 2 each were suffering from behavioural disorder and developmental disorder and 6 children were suffering from substance use disorder. Substance use disorder was found to be a comorbidity. It was found in one child with behavioural disorder and one child

with developmental disorder. 12.3% of boys and 8.6% of girls were having psychiatric illness. Emotional disorders were more in girls. 60% of girls were suffering from emotional disorders. 75% of boys were found to have substance use disorder. Delinquent behaviours were found in 10 children. Of the 10 children, 8 were boys and 2 were girls. Among the 10 children who were having delinquent behaviour, 5 children (50%) were suffering from psychiatric illness. 90 children of the total 100 children were not having delinquent behaviour. Among these 90 children, 6 children (6.7%) were suffering from psychiatric illness. Statistical analysis was done using Pearson Chi-Square test and it was found that there is a significant difference in the psychiatric morbidity among children with delinquent behaviour compared to children without delinquent behaviour.

Age Distribution of Children

Of the 100 children, 27 were between 8-12 years of age and 73 were between 13-18 years of age.

	Frequency	Percent
8-12 years	27	27.0
13-18 years	73	73.0
Total	100	100.0

Table 1. Age Distribution

Gender Distribution of Children

Of the 100 children, there were 65 boys and 35 girls.

Gender	Frequency	Percent
Male	65	65.0
Female	35	35.0
Total	100	100.0

Table 2. Gender Distribution

Prevalence of Psychiatric Illness

11 percent of the inmates were found to have Psychiatric illness.

Psychiatric Illness	Frequency	Percent
Present	11	11.0
Absent	89	89.0
Total	100	100.0

Table 3. Psychiatric Illness

Gender	Emotional Disorder	Behavioural Disorder	Developmental Disorder	Substance Use Disorder	Total
Boys	0	1 (12.5%)	1 (12.5%)	6 (75%)	8
Girls	3 (60%)	1 (20%)	1 (20%)	0	5
Total	3 (23.1%)	2 (15.4%)	2 (15.4%)	6 (46.2%)	13

Table 6. Gender and Type of Psychiatric Illness

Prevalence of Delinquent Behaviour

Of the 100 children, delinquent behaviour was present in 10 children.

Delinquent Behaviour	Frequency	Percentage
Present	10	10.0
Absent	90	90.0

Table 7. Delinquent Behaviour

Age and Delinquent Behaviour

Delinquent behaviour was seen more in older children. 80% of children with delinquent behaviour was in the age group

Types of psychiatric illness

Substance use disorders were the most commonly seen psychiatric illness. 46.2% of children had substance use disorder, 23.1% of children had emotional disorder and 15.4% of children had behavioural disorder and developmental disorder.

Type of Psychiatric Illness	Number of Children Affected
Emotional disorders	3 (23.1%)
Behavioural disorders	2 (15.4%)
Developmental disorders	2 (15.4%)
Substance use disorder	6 (46.2%)

Table 4. Types of Psychiatric Illness

Comorbidity

Substance use disorder was found to be a common comorbidity. It was found in one child with behavioural disorder and one child with developmental disorder.

Gender and Psychiatric Illness

Psychiatric illness was present in 12.3% of boys and 8.6% of girls. Pearson Chi-Square test was used for statistical analysis and p value was found to be 0.569. There was no significant difference between boys and girls in having psychiatric illness.

Gender	Psychiatric Illness Present	Psychiatric Illness Absent	Total
Boys	8 (12.3%)	57 (87.7%)	65 (100%)
Girls	3 (8.6%)	32 (91.4%)	35 (100%)
Total	11 (11%)	89 (89%)	100 (100%)

Table 5. Gender and Psychiatric Illness

Gender and type of psychiatric Illness

Emotional disorders were more in girls and substance use disorders were more seen in boys. Statistical analysis was done by chi-square test and p value was 0.039 which indicates that there was a significant difference in the pattern of psychiatric illness between boys and girls.

13-18 years and 20% of children was in the age group of 8-12 years.

Age	Delinquent Behaviour
8-12 years	2 (20%)
13-18 years	8 (80%)
Total	10 (100%)

Table 8. Age and Delinquent Behaviour

Gender and Delinquent Behaviour

12.3% of boys and 5.7% of girls were having delinquent behaviour. Among children with delinquent behaviour, 80% were boys and 20% were girls. Chi-square test was done, and p value was found to be 0.295. No significant difference was

found between boys and girls in exhibiting delinquent behaviour.

Gender	Delinquent behaviour present	Delinquent behaviour absent	Total
Boys	8 (12.3%)	57 (87.7%)	65
Girls	2 (5.7%)	33 (94.3%)	35
Total	10 (10%)	90 (90%)	100

Table 9. Gender and Delinquent Behaviour

Psychiatric illness and delinquent behaviour:

Among the 10 children who were having delinquent behaviour, 5 (50.0%) children were suffering from psychiatric illness.

Children with delinquent behaviour	10	
Children with Psychiatric illness	5	50%
Children without psychiatric illness	5	50%

Table 10. Psychiatric Morbidity in Children with Delinquent Children

Psychiatric morbidity in children without delinquent behaviour:

6 (6.7%) among the 90 children without delinquent behaviour, were suffering from psychiatric illness.

Children without delinquent behaviour	90	
Children with psychiatric illness	6	6.7%
Children without psychiatric illness	84	93.3%

Table 11. Psychiatric Morbidity in Children without Delinquent Behaviour

Relationship between delinquent behaviour and psychiatric illness: 50.0% of the children with delinquent behaviour were suffering from psychiatric illness whereas 6.7% of children without delinquent behaviour were suffering from psychiatric illness. Psychiatric morbidity was high among children who were showing delinquent behaviour. Statistical analysis was done using Pearson Chi-Square test. Pearson Chi-square value was 17.263 and p value was less than 0.001. There was a significant difference in the psychiatric morbidity among children with delinquent behaviour compared to children without delinquent behaviour.

	Children with Psychiatric Illness	Children without Psychiatric Illness	Total
Children with delinquent behaviour	5 (50.0%)	5 (50.0%)	10
Children without delinquent behaviour	6 (6.7%)	84 (93.3%)	90

Table 12. Relationship between Delinquent Behaviour and Psychiatric Illness

DISCUSSION

This study sampled 100 children and adolescents from orphanages in Kerala. Most of the children (73%) were in the age group of 13-18 years. Boys constitute majority (65%) of the sample. 11% of the inmates were found to have psychiatric illness. 12.3% of boys and 8.6% of girls were

suffering from psychiatric illness. Earlier studies by Humphreys et al¹ and Jozefiak et al² showed high rates of psychiatric morbidity among institutionalised children. Humphreys et al¹ conducted a randomised control trial in Romania, found that 44% of institutionalised children had psychiatric illness. Among institutionalised boys, the rates of psychiatric illness were 45% and in girls the rates were 33%. Jozefiak et al² in their study among adolescents living in residential youth care at Norway found 76.2% of the youth fulfilled the criteria for at least one DSM-IV diagnosis during the previous 3 months. The finding of the present study is not consistent with the earlier findings. This may be due to the higher quality of care provided in the institutions. Kerala has health and social standards that is in comparison with developed countries. The orphanages selected for this study are the orphanages registered under the social welfare department. Due to the strict laws and regulations that is existing in the state of Kerala, the care provided by the institutions to its inmates are under regular scrutiny. The reason for the low prevalence of psychiatric morbidity among inmates of orphanages in this study may due to the good quality of care that the children are receiving.

In the present study, emotional disorders were more in girls. Among boys the commonest diagnosis was substance use disorder. This finding is consistent with the studies by Jozefiak et al² in which girls had 2.5-3 times higher odds for depressive and anxiety disorders and boys had higher rates for conduct disorder. Teplin et al¹¹ in their study among 1829 detained youth in Illinois found that nearly two thirds of males and three quarters of females met diagnostic criteria for one or more psychiatric disorders and half of males and almost half of females had a substance use disorder. More than 40% of males and females met criteria for disruptive behaviour disorders and more than 20% of females met criteria for a major depressive episode.

Delinquent behaviour was present in 10% of children. 12.3% of boys and 5.7% of girls were showing delinquent behaviour. 80% of children with delinquent behaviour was in the age group of 13-18 years. This finding was consistent with the study by Kaylor et al⁷ where boys were more likely to engage in delinquent behaviours than girls and older children were more likely to engage in delinquent behaviours than younger children.

50% of children with delinquent behaviour were having psychiatric illness and only 6.7% of children without delinquent behaviour were having psychiatric illness. This is consistent with the study by Ståhlberg et al,³ Elkington et al,⁵ Silva et al,⁶ and Teplin et al¹¹ where high rates of psychiatric morbidity were found among children who were showing problematic behaviours and who had come in contact with juvenile justice systems.

CONCLUSION

The inmates of orphanages suffer from a variety of mental health disorders. Substance use disorders were found more in boys and emotional disorders were found more in girls. Delinquent behaviours were found among children living in orphanages. There was a significant difference in the psychiatric morbidity between children with or without delinquent behaviour. As there is a significant difference in psychiatric morbidity between children with or without delinquent behaviour, more importance should be given to

identify whether the delinquent behaviour occurs as a part of psychiatric illness. If the delinquent behaviour is a consequence of psychiatric morbidity, interventions should be different. Both boys and girls need mental health services equally. This study presents certain basic data that can help the policy makers to understand the importance of mental health assessment and interventions in institutions such as orphanages.

Limitations

- Small sample size.
- No interventions were planned.

Recommendations

Studies with larger sample size should be conducted in institutions like orphanages to identify the prevalence of psychiatric illness and delinquent behaviours. Gender difference in delinquent behaviour and relationship of delinquent behaviour to each type of psychiatric illness needs to be studied. Appropriate interventions should be planned and given to the children, and effectiveness of interventional strategies should be researched.

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