Study of Health Profile of Children Placed in Remand Home
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ABSTRACT
Context: Children are one of the most vulnerable groups of societies and are at risk of many social evils. They should be identified and provided protective environment and loving care for their adequate growth and development. Aims: To study the Health Profile of children placed in Remand Home. Settings and Design: This was a cross-sectional descriptive study carried out in a government run Remand home in Solapur. Methods and Material: Based on the pilot study, 200 children were included in the study. They were examined regarding their physical and psychological health. If necessary help from remand home authorities, parents and friends, social workers and teachers was taken. Physical examination of children and psychological examination with the help of Strengths and Difficulties Questionnaire was done. Statistical analysis used: Chi square test. Results: Out of 200 children, 78 were delinquent and 122 were non-delinquent. 144 were boys and 56 were girls. Most common reason of admission was financial constraints among non-delinquents and theft among delinquents. In conduct problem scale delinquents and non-delinquents significantly differed but not in case of scales. Overall one or more behavioural problems were seen in 50% of children in Remand Home. One or more physical morbidities were seen in 66.5% of children. Conclusion: In 5 different scales of SDQ scores, 6-30% children were found abnormal. Most of the children belonged to normal and borderline range. One or more physical morbidities were seen in 66.5% of children. Key words: Delinquents, Children, Juveniles, Remand home, Psychological problems. Key Messages: Children in remand homes with psychosocial problems should be identified and taken care of to prevent emergence of juvenile delinquency.

INTRODUCTION
Children are greatest national asset and resource. Children should be allowed and provided opportunity to grow up to become healthy, skillful and robust citizens for the society. They should be provided social justice to serve as an effective tool to curb delinquency in juveniles.¹

But in today’s world children are exposed to mental pressures both in rural and urban areas due to parental illiteracy, ignorance, competitions in various fields, extreme poverty or affluence, losing morals in adult populations and to variety of sources of information which they can easily access and which is at times beyond their scope of understanding and reason. So, it’s our responsibility to mould and shape their present conditions in the best possible way because children have a right to grow up in a nutritious environment, only then can they realize their full potential. According to the Indian constitution there should be separate jails for the juvenile prisoners or under-trials. They are Observation Homes formerly known as Remand Homes. It is essential to know the condition of children in Remand homes. Although physical and psychological status of children plays a very important role in behaviour of children and thereby development of delinquency, there are fewer studies available in the literature on this topic. So, this study is directed to know the Health profile of children placed in a Remand Home.

MATERIALS AND METHODS
It was a descriptive cross sectional study carried out in a Government run Remand home for children in the age groups of 6-18 years. There were two types of children admitted under remand home viz. Children in need of care and protection (CNCP) and children in conflict with law (CICL) taken care by Child Welfare Committee (CWC) and Juvenile Justice Board (JJB) respectively. CNCP included orphans, street children, those whose parents had financial problems, those with single parents etc. CICL include those who engaged in deviant or criminal behaviour. A pilot study was done on 30 children to find out prevalence of psychosocial and health problems among children in remand homes. The prevalence was 13%. The sample size was calculated using the formula

\[ n = \frac{3.84pq}{\sigma^2} \]

Using precision level of 5%, at 95% confidence interval and prevalence of 13%,

\[ n = \frac{3.84 \times 0.13 \times 0.87}{0.05^2} \]

\[ n = 173.72 \]

Cite this article: Prabhakar SP, Balasaheb CR, Devdatta KS, Suresh MK. Study of Health Profile of Children Placed in Remand Home. Int J Med Public Health. 2017;7(4):203-6.
So, the minimum sample size to be collected was 174. So, 200 children admitted during the study period (January 2014 to December 2014) were taken for the study.

The following exclusion criteria were used-
1. Children who were not willing to participate in the study.
2. Children whose history could not be taken because of some inevitable problems like no permission could be taken.
3. Readmissions in remand home.

The data collection was done at the time of admission of child to Remand Home by using Strengths and Difficulties Questionnaire. If necessary help of the parent, guardian, social worker, police or remand home authorities was taken to know the past history of child if the child was not able to tell. Clinical judgement was also used in examination and scoring. Prior written consent for the study was taken from Child Welfare Committee and Juvenile Justice Board.

Strengths and Difficulties questionnaires was used to assess psychological health profile in children. In this questionnaire, five scales were used to detect any abnormality in the child’s behavioural status. The scales were Emotional symptoms scale, Conduct problem scale, Hyperactivity scale, Peer problem scale and prosocial scale. The children were asked the questions as given in the questionnaire and the response of the child was recorded in terms of score 0-2 and total score in each scale was calculated. On the basis of total score, the child was categorized as with normal, borderline or abnormal behaviour.

The behavioural problems were assessed by classifying the children in five groups viz. antisocial problems, habit disorders, personality disorders, psychosomatic complaints and educational difficulties. The children were asked questions regarding the specific disorder and then they were categorized in that group according to the answer given by them using the clinical judgement. Only those who were found to have behavioural problems were included in the calculation and remaining were assumed as normal.

Health and nutritional status of the children was assessed at the time of admission if the child had any sign or symptom of any morbidity then he/she was included in the category “morbidity present”. The weight and height of the children were taken and children were categorized as normal (-2SD to +2SD of height and weight), underweight (< -2SD weight for age) and stunted (< -2SD height for age) according to centre for disease control (CDC) growth charts. The children who were underweight and/or stunted were included in the category of ‘malnutrition’. General and systemic examination of children was done clinically for signs of any other morbidity.

**RESULTS**

The present study was done in remand home on total 200 children which included both delinquents and non-delinquents. Figure 1 shows the distribution of children according to psychosocial problems responsible for admission to remand home.

Figure 2 shows the distribution of children according to age and gender. Percentage of boys was more than girls and more number of children belonged to age group of 12-18 yrs.

It was found that, according to emotional symptom scale maximum, 150 (75%) children were normal and 40 (20%) children were abnormal. 60%, 60% and 65% of children with normal, borderline and abnormal score respectively on emotional symptom scale were Non-delinquents. The difference was statistically not significant (P>0.05). According to Conduct problem scale maximum, 119 (59.50%) children were normal and 61 (30.50%) children were abnormal. Among children with abnormal score maximum i.e. 46 (75.41%) were delinquents and maximum i.e. 93 (78.15%) children with normal score were Non-delinquents. The difference was statistically highly significant (P<0.001). According to Hyperactivity scale, maximum i.e. 188 (94.00%) children were non-delinquents. But the difference was statistically not significant (P>0.05). According to Prosocial scale maximum, 121 (60.50%) children were non-delinquents and 69 (39.50%) children were abnormal. Among children with borderline score maximum i.e. 11 (55.00%) were delinquents and among children with normal score maximum i.e. 76 (62.81%) children were Non-delinquents. The difference was statistically not significant (P>0.05). According to Peer problem scale maximum, 143 (71.50%) children were normal and 23 (11.50%) children were abnormal. Among children with abnormal score maximum i.e. 12 (52.17%) children were delinquents and among children with Borderline score maximum i.e. 24 (70.59%) children were Non-

| Score                      | Normal | Borderline | Abnormal |
|----------------------------|--------|------------|----------|
| Emotional Symptoms Scale   | 0-3    | 4          | 5-10     |
| Conduct problem scale      | 0-2    | 3          | 4-10     |
| Hyperactivity scale        | 0-5    | 6          | 7-10     |
| Peer problem scale         | 0-2    | 3          | 4-10     |
| Prosocial scale            | 6-10   | 5          | 0-4      |

Figure 1: Distribution of children according to psychosocial problem responsible for admission to remand home.

**Figure 2:** Distribution of children according to age and gender.
delinquents. The difference was statistically not significant (P>0.05) using chi square test.

Behavioural problems were seen in 50% of children admitted in remand home. Delinquent children were significantly more among children with behavioural problems (56.00%), as compared to children without behavioural problems (22.00%). The association of behavioural problems and delinquency was statistically highly significant (P<0.001).

[Note - Even if a single category of behavioural problems (among the five mentioned below), is present in a child, he/she was considered to have the problem in this study and is included in the group of 'present']

Figure 3 shows that behavioural problems like antisocial problems, psychosomatic disorders, personality disorders and habit disorders were seen more in delinquents and educational difficulties were more in non-delinquents.

Table 1 shows that out of total 200 children in remand home, 133 (66.50%) children suffered from 1 or more morbidity. Morbidity was more in boys i.e. 104 (78.20%) than in girls 29 (21.80%). The difference was found to be statistically significant (P<0.05).

Table 2 shows that amongst 133 children with morbidity, maximum i.e. 85 (63.91%) were non-delinquents. The association of morbidity and reason for admission was not statistically significant (P>0.05).

Figure 4 shows the distribution of children according to type of physical morbidity. 41.44% children suffered from malnutrition and 23.87% children suffered from anemia. Other morbidities observed were dental caries, ENT problems, opthalmic problems etc.

**DISCUSSION**

On the basis of results, it seems that delinquents suffer from more behavioural problems than non-delinquents. Although the results range from normal to borderline, even the non-delinquents do suffer from some amount of behavioural problems. The overall prevalence of behavioural problems in children was 50%. This finding is different from the finding of the previous studies because these were from different settings.

Chaturvedi PK, Aggarwal AK et al 1984, in their article of psychological study of inmates of a children’s home with special reference to their intelligence and aggressive behaviour found that out of 62 children, 19 did not manifest any psychiatric problem during the period of study, while 69.4% of these inmates had one or the other psychiatric problem. In a study conducted by Ahmad A. et al 9 on 390 male adolescents in a school at Aligarh, the prevalence of psychosocial problems was 17.9%. The most common problem was educational difficulties found in 17.4% children, followed by substance abuse in 13.3% and conduct disorders in 9.2%. The difference in findings can be due to different criteria used for diagnosis of behavioural problems also due to difference in population pool from which children were admitted in remand homes.

In the present study, 133 (66.50%) children suffered from 1 or more morbidity. Most common morbidity found was malnutrition i.e. in 41.44% of children. Dental caries was found in 8.56% of children. The high percentage of morbidities in children can be due to the poor socio-economic status from which they come. Their familial background, social customs,
CONFLICT OF INTEREST

The authors declare no conflict of interest.

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