

## Profile of Cases Brought to the Forensic Medicine Department for Age Estimation Under the POCSO Act, 2012

Ropmay AD<sup>1</sup>, Patowary AJ<sup>2</sup>, Slong D<sup>3</sup>, Bhattacharyya H<sup>4</sup>

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### Abstract

**Background:** The Protection of Children from Sexual Offences (POCSO) Act was enacted in 2012 with a view to curbing the menace of sexual assault, sexual harassment and pornography on children. The present study gives a profile of cases registered under the Act and subsequently brought to the Forensic Medicine Department for the purpose of medicolegal age estimation.

**Material and methods:** Research was conducted in the Department of Forensic Medicine, NEIGRIHMS, Shillong. Data was extracted from records maintained in the office and analyzed using statistical software SPSS version 11 by descriptive analysis. All cases brought for age estimation under the POCSO Act, 2012 for the period May 2013 to June 2018 were included.

**Results:** Medical examinations were performed in compliance to police requisitions from four districts of the state of Meghalaya. A total of 26 (twenty-six) individuals were brought for age estimation during the study period. Among those examined, 81% were victims and 19% accused in sexual offences. The majority of victims were female children in the 6-15 age group.

**Conclusion:** These findings should draw the attention of doctors and healthcare workers to the problem of sexual crime against children and prompt them to work together with law enforcement and social organizations in securing justice for the vulnerable.

**Keywords:** POCSO Act; Sexual offences; Forensic medicine department; Age estimation

### Introduction

Children are the building blocks of the nation and it is our duty as citizens to help them realize their dreams of a bright and hopeful future. A child

is legally defined as any person below the age of eighteen. It is disheartening to note that in recent years we have witnessed so much exploitation and abuse of the most vulnerable members of our society. The Government of India, in its commitment to securing the best interests of children in the midst of escalating injustice against them, took the initiative of introducing a law in this regard. Thus, the protection of children from sexual offences (POCSO) Act was passed in Parliament, received the assent of the President on June 19th and was published in the Official Gazette on June 20th 2012.<sup>1</sup> It has since been implemented in letter and spirit in the state of Meghalaya in northeast India.

The current paper presents a profile of cases registered under the Act and subsequently brought to the forensic medicine department of our institution for the purpose of age estimation from May 2013 to June 2018. Our findings gave us an idea about the caseload and magnitude of the

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**Authors Affiliation:** <sup>1</sup>Associate Professor, <sup>2</sup>Professor and Head, <sup>3</sup>Assistant Professor, Department of Forensic Medicine, <sup>4</sup>Assistant Professor, Department of Community Medicine, North Eastern Indira Gandhi Regional Institute of Health and Medical Sciences, (Neigrihms), Shillong, Meghalaya 793018, India.

**Corresponding Author:** Ropmay AD, Associate Professor, Department of Forensic Medicine, North Eastern Indira Gandhi Regional Institute of Health and Medical Sciences, Shillong, Meghalaya 793018, India.

**E-mail:** drdonna@rediffmail.com

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problem as a whole which would then enable us to improve our services by strengthening liaison with law enforcement and local government in dealing with forensic issues.

## Materials and Methods

The present study is a retrospective observational one conducted in the Department of Forensic Medicine, NEIGRIHMS, Shillong. All cases which were brought for age estimation under the POCSO Act, 2012 for the period May 2013 to June 2018 were included in the study. The cases which were registered under sections of the Indian Penal Code (IPC) alone were excluded from the same. The parameters studied were sociodemographic characteristics, and possible correlation between stated age and estimated age of persons examined.

### Data analysis

Data was extracted from records maintained in the department, entered in Microsoft Office Excel 2007 sheet and analyzed using statistical software SPSS version 11 by descriptive analysis. Pearson's correlation coefficient test was applied to find out if there is any relationship between the stated age and the estimated age.

### Ethical considerations

Relevant data was collected and stored in confidentiality with the principal investigator. Anonymity of cases was strictly maintained during the course of the study. Approval for the project was obtained from the Institutional Ethics Committee (IEC) on 11th June, 2018.

## Results

Medical examination for the purpose of age estimation was conducted in compliance to police requisitions from four districts of the state of Meghalaya, i.e. East Khasi Hills, West Khasi Hills, Ri Bhoi and West Jaintia Hills. Altogether, 26 individuals were brought to the Forensic Medicine Department under the Protection of Children from Sexual Offences (POCSO) Act 2012 during the study period out of which 21 were victims and 5 accused. All the accused were males (Table 1).

Among the victims, 20 were females and 1 was a male child. The majority (66.6%) of victims examined were in the 6–15 age group (Table 2). We observed that 62% of sexual assaults occurred in rural areas of

the state. We also found that 67% of victims hailed from villages in and around Meghalaya. The value of Pearson's correlation coefficient was calculated to determine the correlation between stated age and estimated age ( $R^2 = 0.9$ ). This indicates that there is a strongly positive association between stated age and estimated age in our study (Fig. 1).

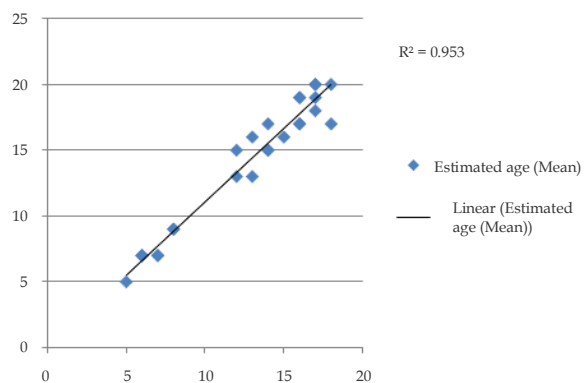
The detailed results of the study are demonstrated in Tables 1 and 2 and Figure 1.

**Table 1:** Characteristics of persons examined

Criminal profile	Number	Percentage (%)
Victim	21	81
Accused	5	19
Total	26	100
Gender profile		
Male	6	23
Female	20	77
Total	26	100
Age profile		
≤ 5 years	1	4
6–8 years	7	27
12–15 years	8	31
16–18 years	10	38
Total	26	100

**Table 2:** Characteristics of victims examined

Gender profile	Number	Percentage (%)
Male	1	4.8
Female	20	95.2
Total	21	100
Age profile		
≤ 5 years	1	4.8
6–8 years	7	33.3
12–15 years	7	33.3
16–18 years	6	28.6
Total	21	100
Origin		
Rural	14	67
Urban	7	33
Total	21	100



**Fig. 1:** Correlation between stated age and estimated age (Mean)

## Discussion

The Department of Forensic Medicine at NEIGRIHMS started taking up cases of age estimation from the year 2012 concurrently about the same time the POCSO Act was enacted. Medical age estimation from doctors is necessary in cases where documents or certificates are either missing or found to be fabricated or manipulated.<sup>2</sup> According to Indian law, even consensual sexual intercourse amounts to an offence if the woman in question is less than 18 years of age.<sup>3</sup> Hence, when minor adolescent girls involved in romantic sexual relationships with their boyfriends are brought for medical examination, they tend to claim to be older than they actually are. It was observed that perpetrators were more likely to lower their age in attempts to pass off as juveniles to avoid being tried as adults for the same crime. The occurrence of sexual assaults in rural areas could be due to lack of privacy and long absences of working parents or guardians from home leaving children exposed, unsupervised and vulnerable to unwanted invasion of their personal space. The victims native to rural areas were probably unsure about their age for want of documentation. Again, it is seen in this research that victims hailing from villages are susceptible to exploitation especially when they reside in towns and cities away from their place of origin.

A study on the working of Special Courts under the POCSO Act, 2012 in Assam shows that the majority of victims (40%) were in the age group 12–15 years which is consistent with our findings. In 50.58% of cases, age was determined by way of medical examination that included physical, dental, and secondary sexual characteristics.<sup>4</sup> Similarly, Yadukul S et al. found that the 13–18 age group constituted 91.4% of cases booked under the POCSO Act.<sup>5</sup> Research conducted by Kulkarni KV et al. reveal that the maximum incidence in female victims is 11–14 years with a minimum age of 2 years and maximum age of 17 years.<sup>6</sup> On the other hand, the research findings of a study done in Bangalore are not in agreement with ours in that 68.5% of female victims ( $n = 35$ ) were in the older age group of 15–20 years.<sup>7</sup> A golden rule to medical professionals working with children is to report all reasonable degree of suspicion in child sexual abuse to the legal authorities.<sup>8</sup> The Government of India has issued specific guidelines for responding to children, both boys and girls, facing sexual abuse as its prevalence in the country is known to be high.<sup>9</sup> According to Dr. Uwom O. Eze of Nigeria, sexual assault is also not discriminatory to sex but studies have shown that the number of female

victims is far greater than males.<sup>10</sup> In contrast, the findings of a study by Elgendy IS et al. in Cairo, Egypt demonstrated that most of the victims (71.8%) were males.<sup>11</sup>

In our center, bone age is estimated by referring to Galstaun's chart for Indian subjects.<sup>12</sup> However, it is important to appreciate that skeletal and chronological ages are not the same measurement of time since birth, and depending on the analytical approaches applied, there will be an inherent source of variation between estimated (biological) age and actual (legal) age.<sup>13</sup> Mughal AM et al. observed a strong positive correlation between chronological age and bone age in both the genders.<sup>14</sup> Similarly, a study conducted at Manipal among children aged 9–14 years showed a statistically significant ( $p < 0.01$ ) correlation between dental age, skeletal age and chronological age.<sup>15</sup> In our research, we made an attempt to compare the stated age with the estimated age using Pearson's correlation coefficient. It is to be noted that the age as stated by the examined individual is not necessarily the actual age and this is especially so in the absence of valid supporting documents. Nevertheless, we did find a positive correlation between the two variables (Fig. 1).

The Protection of Children from Sexual Offences (POCSO) Act, 2012 has provisions to ensure that hospital and courtroom procedures are child-friendly and carried out in a congenial environment in the best interests of survivors. According to Phad LG et al., not only medical examination but also counseling of the survivor by a social worker and psychologist is most important and should be made mandatory in all cases of childhood sexual abuse.<sup>16</sup>

## Conclusion

It can be concluded that most child survivors of sexual offences are girls in the age group of 6–15 years while perpetrators tend to be older male children or adults. These crimes occur more in rural areas and in children of rural origin. The Forensic Medicine Department has a role in medical examination and age estimation of both the accused and victims of an offence. As doctors and healthcare workers, we need to be aware of the growing incidence of this problem in the minor population and work closely with law enforcement and social organizations to strengthen our resources and strive towards a common goal of securing health and justice for the vulnerable.

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