

## ORIGINAL ARTICLES

# Knowledge and Awareness Among Medical and Dental Interns, Trainee Nurses Regarding Child Abuse and Neglect: A Questionnaire Study

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**ABSTRACT**

**Background/Purpose:** Child abuse and neglect refer to any intentional harm or failure to act that results in physical, emotional, or psychological harm to a child. This can include physical abuse, emotional abuse, sexual abuse, and neglect, which is the failure to provide for a child's basic needs. Child abuse can have long-lasting effects on a child's development and well-being, making it a critical public health and social issue. Recognizing and addressing child abuse and neglect is essential for protecting children's rights and ensuring their healthy development.

**Objective:** The aim of the present study is to evaluate the baseline level of knowledge and awareness among interns regarding child abuse and neglect, including their familiarity with signs and symptoms, risk factors, reporting protocols, and legal obligations.

**Methods:** The study was an observational, questionnaire-based survey approved by the ethical committee. The survey used an online Google Form. The questionnaire, based on previously validated instruments, had five sections: Demographics, Knowledge, Attitudes, Assessment and Awareness.

**Results:** Most respondents showed moderate to high knowledge of child abuse and neglect, particularly in identifying types and signs. Among 3 professionals, an average 89.6% linked emotional attachment to CAN. However, there were gaps in recognizing subtle signs and broader risk factors. 86.8% dental interns, 88.3% medical interns and 89.7% trainee nurses were confident in recognizing suspected

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cases and also aware of safe touch. On average of 82% medical and dental interns were aware of legislation regarding CAN.

**Conclusion:** Medical professionals often lack the knowledge to identify and respond to child abuse, leading to hesitation in reporting due to uncertainty or fear of misjudgment. Sensitization programs for interns and trainee nurses can enhance their ability to recognize, empathize, and confidently report cases, ensuring timely protection for children.

#### KEYWORDS

- Child abuse and neglect • Medical professionals • lack of knowledge

## INTRODUCTION

Child abuse and neglect are serious societal issues that profoundly affect the well-being and development of children worldwide. Acc to Gill (1968) child abuse is defined as the nonaccidental physical injury, minimal, or fatal, inflicted upon children by persons caring for them. It is an overt Act of Commission of a caretaker – physical, emotional, or sexual.

In 1999, the WHO defines “Child abuse or bullying is all forms of physical and/or emotional ill-treatment, sexual abuse, neglect or negligent treatment or commercial or other exploitation, resulting in actual or potential harm to the child’s health, survival, development or dignity in the context of a relationship of responsibility, trust or power”.

Acc to Schmitt B (1986), there are ten(10) subtypes of child abuse and neglect, physical abuse, sexual abuse, failure to thrive, intentional drugging or poisoning, Munchausen syndrome by proxy, medical, dental, safety, emotional and physical neglect.<sup>1</sup> Physical abuse involves the use of force that results in bodily injury, while sexual abuse involves any form of sexual activity or exploitation imposed on a child. Emotional abuse encompasses behaviors such as verbal abuse, humiliation, rejection, and neglecting a child’s emotional needs.

According to WHO (2022), it is estimated that up to 1 billion children worldwide, between the ages of 2 and 17, have endured physical, sexual, or emotional violence, or neglect, within the past year.

According to Fernandes G *et al* (2021) 74% of Indian children report physical abuse; up to 72% report emotional abuse and up to 69% report sexual abuse and up to 71% of Indian children report overall neglect, up to 60% report emotional neglect and up to 58% report physical neglect.<sup>2</sup>

The consequences of child abuse and neglect can be severe and long-lasting, impacting not only the child’s physical health but also their emotional, psychological, and social development. Children who experience abuse and neglect are at increased risk of developing physical and mental health problems, engaging in risky behaviors, experiencing difficulties in school, and encountering challenges in forming healthy relationships later in life.

Approximately 50% of physically abused children experience trauma to the head and surrounding areas; the most common injuries to the head and face are soft tissue injuries, particularly bruises, which are also the most frequent type of injury in child abuse cases; and injuries to the upper lip and maxillary labial frenum are often characteristic lesions in severely abused young children.<sup>3</sup>

Medical and dental interns, as well as trainee nurses, play a critical role in identifying and managing cases of child abuse and neglect since they are often the first to encounter the patients. These professionals should be able to identify signs of physical abuse, such as bruises, fractures, and dental injuries, as well as signs of neglect, such as poor hygiene and untreated medical or dental conditions. Nurses should be vigilant in recognizing behavioral indicators of abuse or neglect, such as withdrawal, fearfulness, and anxiety in children.

The purpose of the study on “Knowledge and Awareness Among Medical and Dental Interns Regarding Child Abuse and Neglect: A Questionnaire Study” is to assess the level of understanding and awareness that medical, dental interns and trainee nurses have about child abuse and neglect. This includes evaluating their ability to recognize signs of abuse, their knowledge of reporting

procedures, and their preparedness to handle such cases in their professional practice. The findings aim to identify gaps in knowledge and training, ultimately contributing to the development of better educational programs and protocols to ensure that future healthcare professionals are equipped to protect and support vulnerable children.

## MATERIALS AND METHODS

### Study design

The study was designed as a single blinded, observational, questionnaire based study complied with the ethical committee approval (MGDC/IEC/1458/JPR/2024/40).

### Sample Size Calculation

The total sample size calculated to be 200, which was calculated using Openepi software (v3.0).

### Participants

This survey was conducted among 60 students from Mahatma Gandhi Medical College, 58 students from Mahatma Gandhi Dental College, and 56 students from Mahatma Gandhi Nursing College, all part of Mahatma Gandhi University of Medical College. The questionnaire was prepared using Google Forms (Google LLC, Mountain View, CA, USA) and distributed via a shared Google link.

### Questionnaire

The questions in the questionnaire were

validated through pilot testing and organized into five sections.

**Section I:** Demographic Information (including age, gender, institution, and year of study).

**Section II:** Knowledge about child abuse and neglect. (9 items)

**Section III:** Participant attitude about child abuse and neglect. (4 items)

**Section IV:** Assessment on types, signs, and risk factors of child abuse. (9 items)

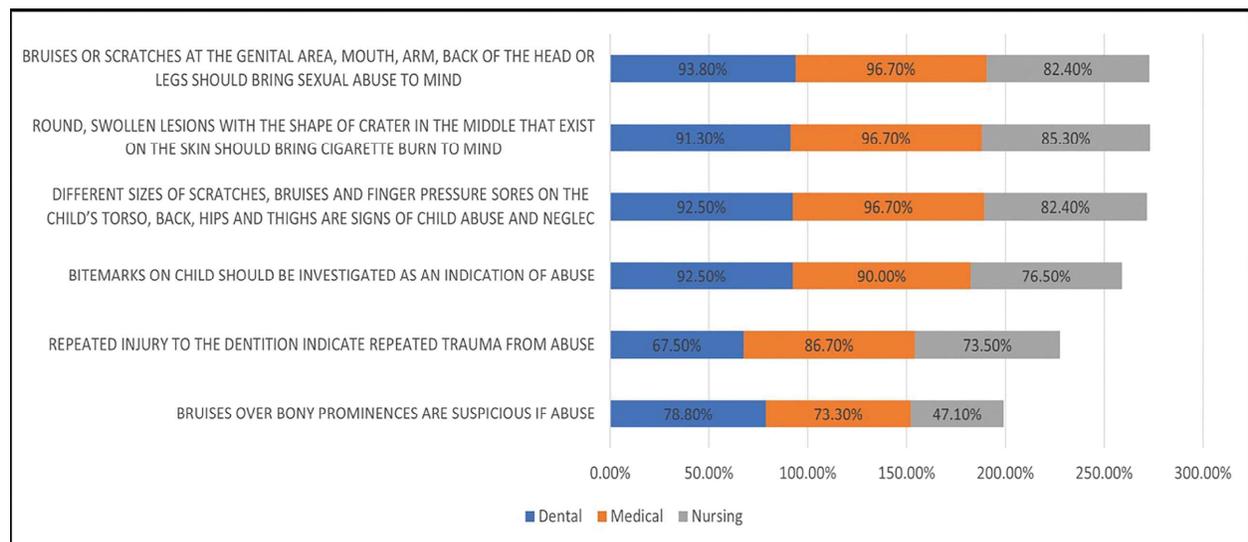
**Section V:** Awareness of reporting procedures. (11 items)

## RESULTS

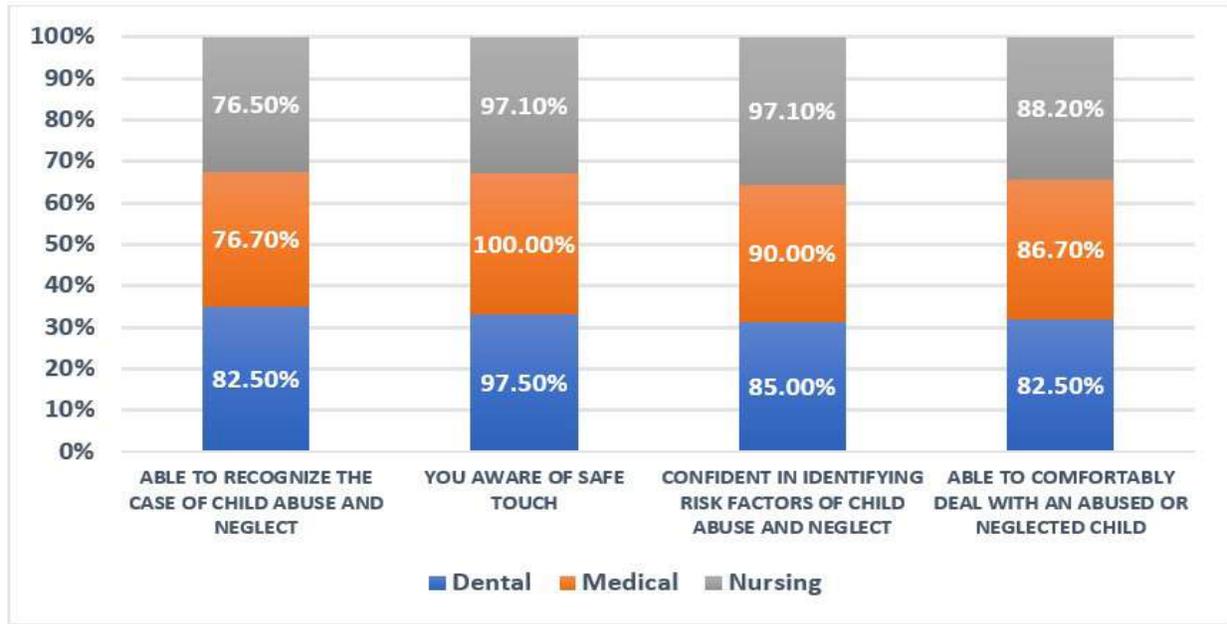
A total of 174 respondents completed the questionnaire. The study utilized an anonymous, self-administered questionnaire to collect data. Statistical analysis was performed using the Wilcoxon and Kruskal-Wallis non-parametric tests, with a significance level set at  $p < 0.05$ .

Graph 1 reveals that 90% of dental interns demonstrated greater awareness and knowledge of the signs and symptoms of CAN cases, while nurses showed the least awareness, with an average of 74%.

Graph 2 illustrates participants' responses regarding their confidence in recognizing and managing CAN cases. Medical interns were the most confident, followed by trainee nurses, with dental interns being the least confident.



Graph 1: Graph representing the responses of participants regarding assessment of CAN

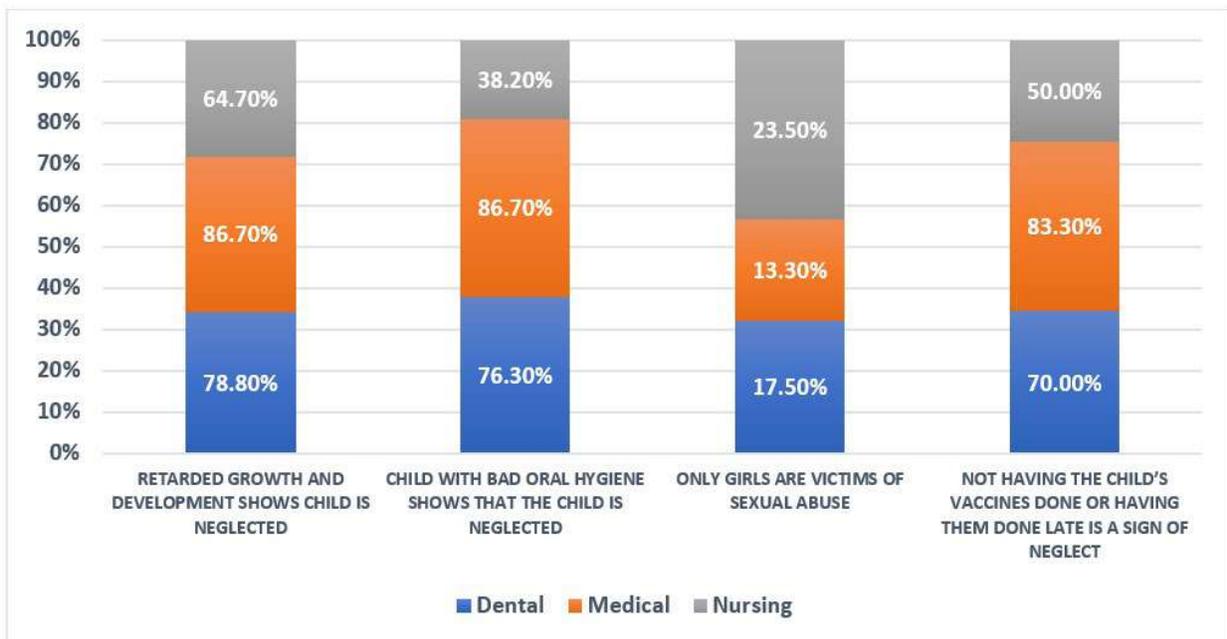


Graph 2: Graph representing the response of participants regarding attitude about CAN

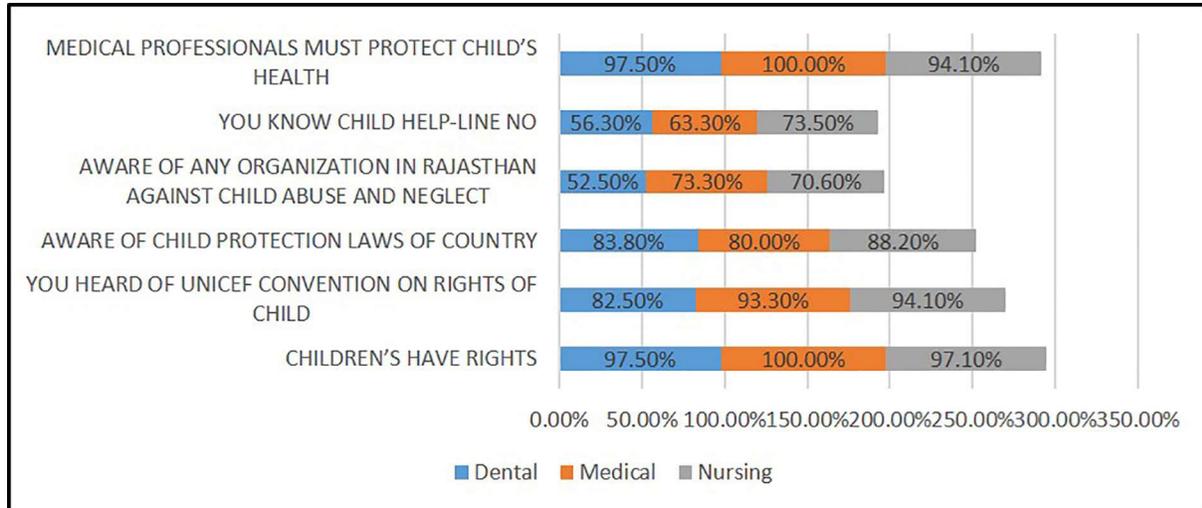
Graph 3 presents participants' responses regarding their knowledge of factors associated with CAN, such as delayed growth, poor oral hygiene, and missed vaccinations. Among dental interns, 86.7% believed CAN could be linked to delayed growth and poor oral hygiene. In comparison, 78.8% of medical interns and 64.7% of trainee nurses associated delayed growth, while 76.3% of medical

interns and 38.2% of trainee nurses identified poor oral hygiene as a potential indicator of CAN.

Graph 4 highlights participants' knowledge of reporting procedures for CAN cases. Trainee nurses were the most knowledgeable about the child helpline number and child protection laws and organizations, followed by dental interns and then medical interns.



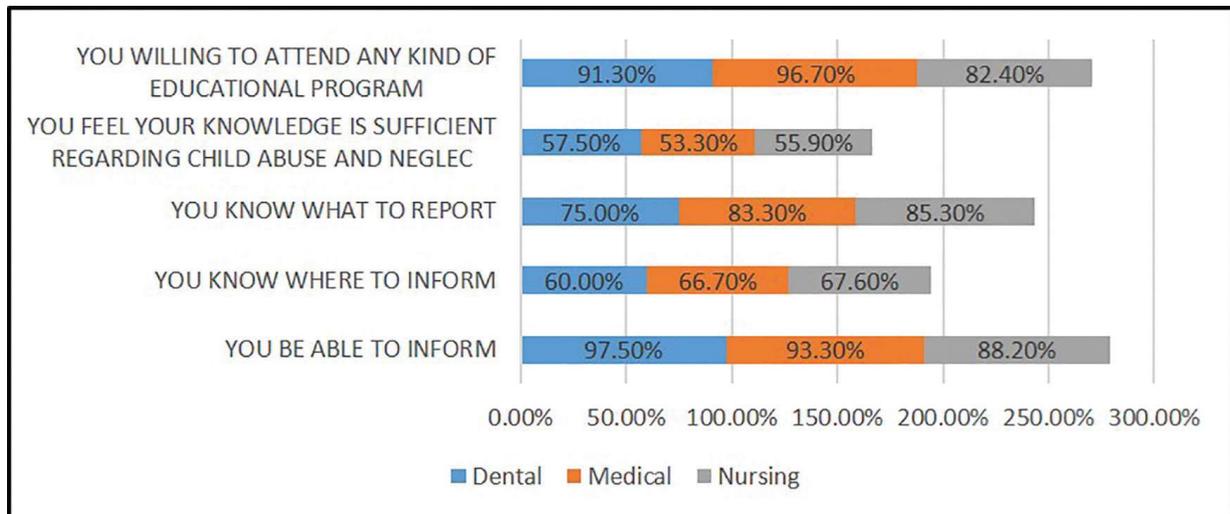
Graph 3: Graph representing the response of participants regarding knowledge about associated factors with CAN



**Graph 4:** Graph representing the response of participants regarding awareness of reporting procedures of CAN cases

Graph 5 summarizes participants' attitudes toward the protocol for reporting serious CAN cases and their willingness to attend

educational programs. All three professional groups agreed that their knowledge of CAN cases is insufficient.



**Graph 5:** Graph representing the response of participants attitude of further willingness of attending the similar program

## DISCUSSION

Child abuse and neglect are prevalent issues worldwide, with many cases going unrecognized and unreported. It is essential for medical professionals to recognize these situations and be well-versed in the reporting procedures to ensure timely intervention for affected children. This study is an observational questionnaire-based investigation aimed at evaluating the knowledge and awareness of medical and dental interns, as well as trainee nurses, regarding child abuse and neglect.

Interns in the medical and dental fields as well as nurses work with children in a range of hospital and community settings, and reporting any suspected cases of abuse is required. To identify abused child and to be able to take proper action in terms of providing immediate and follow up care as well as reporting to authorities is possible only when one has sufficient information child abuse.

According to Alvarez (2003) and Berkowitz (2008), professionals frequently do not have sufficient understanding of the symptoms and

indicators of the different forms of CAN, which can cause them to fail to identify the problem when it occurs<sup>4,5</sup>.

According to the findings of the current study, half of medical interns think that psychological problems are the most common and should be given priority when addressing cases. An average of 37% of them then mentioned physical abuse, with sexual abuse being the least frequently reported.

Among the three professionals, an average of 89.6% thought that parents' educational attainment could be linked to child abuse and neglect.

Gillham (1998) showed a connection between parent unemployment and the likelihood of child abuse<sup>6</sup>. It is crucial for healthcare professionals to understand that child abuse is not limited to poor socioeconomic status and poverty, even in light of these findings.

On average, 86.8% of dental interns, 88.3% of medical interns, and 89.7% of trainee nurses expressed confidence in recognizing suspected cases of child abuse and neglect, as well as being aware of the concept of safe touch.

The study's findings indicate that respondents' understanding of the signs of child abuse was inadequate, with average scores of 69%, 74%, and 56% for dental, medical, and trainee nurses, respectively. The results of this study, which have been reported in similar studies around the world, hinted at a problem of ignorance of physical abuse indications in many different domains.<sup>7-10</sup>

Medical professionals in the Bagalkot district in north Karnataka exhibited poor comprehension because they had inadequate understanding about child abuse and neglect, according to Kirankumar (2011) comparison of similar reports from India<sup>11</sup>.

Deshpande (2015)<sup>12</sup> also concluded that medical and dental residents are not sufficiently prepared to exhibit their role in protection of child from abuse. A significant gap existed between recognizing signs of physical child abuse and responding effectively.

However, it's crucial to keep in mind that toddlers are known to be more vulnerable to unintentional falls throughout their early

walking years, which could result in injuries to bony prominences. A child protection training program is likely to include instruction on how to distinguish between these two scenarios.<sup>13</sup>

In the current study, 80% of medical residents and 83.8 % of dental residents were aware of Indian legislation concerning child safety and abuse. Comparing the current study's findings to those of Deshpande (2015), who found that only 60.7% of medical interns and 48.8% of dentistry interns were aware about the laws of the country respectively. The findings were also dissimilar with the study done by Al Buhairan *et al.* (2011)<sup>14</sup> where only 22% of dental interns were aware.

Over 60% of medical interns and training nurses were aware of the kid assistance line number and 50% of Dental interns knew the policy for reporting such cases. More than 85% of respondents said they would like to see a symposium or continuing education course on child abuse and protection in contrast to the study done by Bhagya (2023)<sup>15</sup> where as 98% expressed their need for comprehensive education and training.

Establishing procedures to handle CAN instances also requires effective communication between clinicians, child protection teams, and local authorities.

## CONCLUSION

Awareness of child abuse and neglect is crucial for medical professionals, as many lack the knowledge to properly identify and respond to such cases. Some may hesitate to report suspected abuse due to uncertainty or fear of making a wrong judgment. To address this, sensitization programs or workshops should be organized, specifically targeting interns and trainee nurses, to help them identify cases, empathize with patients, and build confidence in recognizing and reporting abuse. This would ensure that more children receive timely protection.

Ultimately, creating safe and nurturing environments for children is essential for their healthy development and well-being. By working together as a society to prevent and respond to child abuse and neglect, we can ensure that all children have the opportunity to thrive and reach their full potential.

## LIMITATIONS

The study's limitations include a relatively small sample size of 200 participants, which may not fully represent the broader population of medical and dental interns and trainee nurses. Self-reported data could introduce response bias, as participants may overestimate their knowledge or attitudes. Additionally, the study relied on an anonymous, self-administered questionnaire, which limits the ability to probe deeper into participants' understanding or reasoning. Finally, the lack of longitudinal follow-up prevents assessing whether educational interventions could improve awareness and handling of CAN cases.

**Conflict of Interest:** Nil

**Support:** Nil

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