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Identification of Child and Youth Maltreatment at Emergency Departments

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ABSTRACT

The purpose of the study was to describe emergency department nursing staff's ratings and experiences of identifying child and youth maltreatment. The study aimed at producing information that can be used in nursing to promote the detection of maltreated children and youth. The data was collected using a Webropol survey in autumn 2022 and spring 2023. The quantitative data was analysed using statistical methods and the qualitative data using inductive content analysis. The majority of the nursing staff at emergency departments rated their competencies in identifying physical child and youth maltreatment and neglect of care as rather good. In contrast, they did not assess their competencies in identifying psychological maltreatment as good. The emergency department staff were aware of factors associated with child and youth maltreatment, including parents' lacking care skills, nutritional problems, signs of physical violence, neglect of a child's medical care, and situations that threaten a child's or youth's mental and physical health.

Keywords: Child, identification, youth, maltreatment.

INTRODUCTION

Child maltreatment is an example of ACEs or Adverse Childhood Experiences (Hughes et al., 2017). Maltreatment has a variety of serious, long-term effects on the individual's life. It is therefore important that an effort is made to prevent maltreatment and its recurrence more effectively. It has been estimated (WHO 2016) that approximately 300 million children aged 2-4 years experience some form of maltreatment, for example disciplinary violence or emotional maltreatment. Staff at emergency departments are in a key position to identify signs of maltreatment and differentiate between injuries caused by maltreatment and accidents.

LITERATURE REVIEW

Promotion of child and youth wellbeing is essential, because the foundation for mental health and functioning is created in childhood. Child maltreatment involves physical, mental or emotional and sexual maltreatment, and neglect of care or basic needs. There is some variation in the concepts are used for the various forms of maltreatment (Laajasalo et al. 2023), and

maltreatment and violence are frequently used synonymously. All forms of maltreatment have serious, long-term effects into the adulthood and across generations. In addition to causing acute traumas, maltreatment has multiple direct and indirect adverse effects on a child's health and social wellbeing (Norman et al. 2012). Childhood maltreatment increases the risk of developing mental health problems. Some research has dealt with the immediate risk for psychiatric disorders caused by maltreatment in early childhood (Winter et al. 2022), but the effects may also be delayed (Andersen 2016). Schlensog-Schuster (2024), striving the raise awareness of emotional maltreatment, found it to have strong effects on internalizing disorders (e.g. depression and anxiety) in older youth and externalizing disorders (e.g. hyperactivity and aggression) in younger children. Although the detrimental effects of emotional maltreatment are well known, the social, clinical, and legal work practices lag behind this understanding (Baker et al. 2021), possibly because of lacking a universally and culturally accepted definition of emotional or psychological maltreatment (Baker & Brassard, 2019). It should also be noted that recurrent maltreatment is especially detrimental to a child's health and wellbeing (Finkelhor et al. 2009). Exposure to family violence increases childhood hospitalisations (Orr et al. 2020). Furthermore, children who have experienced maltreatment may be more likely to use violence towards their own children (Bartlett et al. 2017, Ellonen et al. 2017, Mulder et al. 2018) or to transmit the intergenerational maltreatment in some other form.

Despite its adverse effects, child maltreatment may remain hidden. Social and healthcare professionals do not always identify the phenomenon in their encounters with families, information is not passed on between authorities, or parents do not report maltreatment. According to the national FinChildren survey, 47 % of the parents reported maltreatment in the family, while approximately 1% of their respective public health nurses thought that there was a problem of child maltreatment (Leppäkoski et al. 2023). In addition, service providers hesitate to document maltreatment if they lack concrete evidence (Hooft et al. 2015, Kivelä 2019). However, early detection and effective prevention of maltreatment, including appropriate health documentation, are essential tools in helping families living with maltreatment. Lack of documentation in electronic health records can result in missing the window of early intervention and adequate coordination of health services (Karatekin et al. 2018).

A systematic review and meta-analysis (Syed et al. 2021) revealed that for young children, primary diagnoses of child maltreatment, specific injuries (fractured ribs, retinal bleeds etc.) and physical assault had a high positive predictive value (pooled PPVs 55.9%–87.8%) for child maltreatment. A study showed that the proportion of femur and humerus shaft fractures attributed to maltreatment was high in children under 6 months (von Heideken et al. 2020).

The detection of signs of child maltreatment and the identification of risk circumstances are necessary for early interventions (Rantanen et al. 2022, www.hotus.fi). It is possible to prevent the occurrence and recurrence of maltreatment, and to promote the child's growth, development and health the whole family's wellbeing. Injuries caused by child maltreatment are treated in health services, frequently at emergency departments. A study with prehospital emergency care providers (Salminen-Tuomaala et al. 2021) showed that the respondents had encountered signs of physical and psychosocial maltreatment in children and young people, and family challenges, contexts, and economic and social problems indicative of child

maltreatment. This study focuses on the experiences of the nursing staff at emergency departments to ensure that injuries and other signs of child maltreatment are detected more effectively than before.

Research Purpose and Research Questions

The purpose of the study was to describe emergency department nursing staff's ratings and experiences of identifying child and youth maltreatment. The study aimed at producing information that can be used in nursing, especially at emergency departments and in acute nursing, to promote the detection of maltreated children and youth. The research questions were:

1. How do nursing staff rate their ability to identify various forms of child and youth maltreatment?
2. What kind of signs and situations help them identify child and youth maltreatment?

RESEARCH DATA AND METHODS

Target Group

The target group consisted of nursing staff at emergency departments of one university hospital and four central hospitals. The staff members were Registered nurses, Paramedic Nurses and Practical Nurses.

Data Collection

The study is part of larger research project called Identification of Maltreatment in prehospital and emergency department services. The data was collected using an electronic Webropol survey in autumn 2022 and spring and summer 2023. The questionnaire had been developed by the investigators conducting the survey, and it had been piloted earlier in a survey with prehospital emergency care providers, accessed through the contacted through the Finnish Association of Paramedics and A & E nursing professionals (Salminen-Tuomaala et al., 2024). The questionnaire had seven background questions on respondents' age, sex, basic education, professional education, occupation, workplace and work experience in years. In addition, the questionnaire included six Likert scale questions and four open questions. The questionnaire was forwarded to the target group or Registered nurses, Paramedic Nurses and Practical Nurses at emergency departments linked to an email through research coordinators of each hospital. The participants were able to reply anonymously through the link. They could choose they wanted to have the questionnaire in the Finnish or Swedish language. This article presents the results from the perspective of identifying child and youth maltreatment. The results on the identification of elder maltreatment were reported in an earlier article (Salminen-Tuomaala et al., 2024).

Data Analysis

The quantitative data was analyzed using IBM Statistics for Windows 28 (Cathala & Moorle 2018) and the qualitative data using inductive content analysis (Elo et al. 2022). The purpose of the quantitative questions was to gather background data on the nursing staff at emergency departments and on their ability to identify various forms of maltreatment (Research question 1). Frequences and percentages were used to report the quantitative results. The qualitative data was read through several times. Phrases, clauses and sentences representing a coherent idea as a response to the open question on child and youth maltreatment constituted the unit

of analysis. They were reformulated into 137 reduced expressions, which retained the original core idea of the phrases/ clauses/ sentences. Following this, the reduced expressions were grouped based on similarities. The categories formed where collapsed into higher level categories, and finally into one main category, with the purpose of describing the signs and situations that helped staff identify child and youth maltreatment (Graneheim & Lundman 2004).

Ethics and Reliability

Permission to conduct research was obtained from the four central hospitals and the university hospital. Ethical approval was not necessary, since the participants were nursing staff, not patients. A response to the online survey was considered consent to participate in the study. Good scientific practice as defined by the national guidelines (TENK 2023) was followed throughout the study. The target group received a cover letter containing information about the study, participation and use of research material. Participation was voluntary.

The topic was ethically sensitive, so it was important that the nursing professionals could decline participation if they found the topic too painful. (Aho & Kylmä 2012). In addition, respondents were told that they could withdraw at any stage. Their anonymity was secured throughout the research process (TENK 2023, Kang & Hwang 2023).

Evaluating the reliability and validity of the quantitative part of the study (Heale & Twycross 2015), it was found that the study measured what it was intended to measure. The results are generalisable to a larger population nationally. The sample can be considered representative, as it involved emergency department staff at one university hospital and four central hospitals. To increase research reliability and coverage, respondents could choose if they used the Finnish or Swedish language. The reliability may have been reduced by the relatively limited number of respondents.

As regards the qualitative data, the research rigour was evaluated from the perspectives of credibility, confirmability, reflexivity and transferability (Elo et al. 2014, Noble & Smith 2015). The credibility of the research was increased by having respondents describe their personal experiences of the phenomenon to be studied. To increase the confirmability of the study, an effort was made to describe the analytical process carefully, but without jeopardising respondents' anonymity. Having encountered maltreated children and youth during their nursing career, the researchers also attended to their potential preconceptions (reflexivity). To facilitate the evaluation of transferability, the respondents' background was described briefly. The findings are transferable and useful in the national nursing context in Finland and they can provide important insights internationally as well.

RESULTS

Demographic Respondent Data

The respondents were 76 nurses at hospital emergency departments; 69 Registered Nurses, 3 Paramedic Nurses and 4 Practical Nurses. The majority or 62 (81.5%) of them were women and 14 (18.5%) men. The respondents' age ranged from 24 to 66 years, with the means of 36.8 years and median of 35 years. Their basic was general upper secondary school (68.4 %), primary or comprehensive (26.3 %) or middle school (5.3 %). Most respondents (n=63; 82.9%) held a

Bachelor-level degree from a University of Applied Sciences and six respondents (7.9%) had a Master-level degree from a University of Applied Sciences. The remaining respondents had a vocational qualification (n=4, 5.3%) or a University degree (n=3, 3.9%). The respondents' work experience ranged from 2 to 40 years, with the means of 12.8 years and median of 10.5 years.

The great majority of the respondents (n=70, 92.1%) reported that they had encountered suspected cases of maltreatment at the emergency department. Only six respondents had not identified any maltreatmented patients in their work. Approximately one third or 32.1% of the respondents replied that had encountered suspected cases of maltreatment every month; 35.7% every week, and 5.4% daily. In contrast, 23.2% of the respondents reported that they had suspected maltreatment of their clients 1-3 times per year; and 3.6% said they had suspected maltreatment more often than 3 times a year, but not on a monthly basis.

When asked how frequent cases of suspected child maltreatment were at the emergency departments, 22 % of the respondents found that there had been very few, and 46 % found that there had been rather few cases. A minority of 12 % thought that cases of suspected child maltreatment were rather common, whereas 20 % chose the response option "neither many, nor few" cases. The nurses' responses to the frequency of suspected youth maltreatment were: very few cases 2 %; rather few cases 48 %; rather many cases 34 %, and very many cases 2 % of the respondents. The remaining 14 % selected the response option "neither many, nor few" cases.

Identifying Various Forms of Child and Youth Maltreatment

Table 1: Identification of various forms of child and youth maltreatment by nursing staff at emergency departments

Form of maltreatment	Very poorly	Rather poorly	Neither well nor poorly	Rather well	Very well	Mean	Median
I can identify physical maltreatment in children or youth	0 %	4 %	24 %	62 %	10 %	3.8	4.0
I can identify mental maltreatment in children or youth	2 %	24 %	34 %	30 %	10 %	3.2	3.0
I can identify neglect of care in children or youth	0 %	6 %	24 %	60 %	10 %	3.7	4.0

As shown in Table 1, the majority of the respondents found that they could identify signs of physical maltreatment (62 %) or signs of neglect (60 %) in children or youth rather well. However, only 30% reported that they were rather well able to detect mental maltreatment.

Over half of the nurses (52 %) rated their documentation skills as rather good and 8 % as very good. In contrast, 22 % of the respondents reported that they had rather poor skills and 2% found that they had very poor skills in documenting child and youth maltreatment. More than a fifth (22 %) rated their documentation skills as neither good nor poor.

Signs and Situations Indicating Child or Youth Maltreatment

Table 2: Identifying signs and situations indicating child or youth maltreatment by nursing staff at emergency departments

Sub-category	Generic Category	Main Category
Lack of parental care	Parents' lacking care skills	**Identifying signs and situations indicating child or youth maltreatment**
Clueless parenting		
Poor parenting capacity		
Insecure mother-child relationship		
Lack of an attachment relationship		
Failure to attend to the child's nutritional needs	Nutritional problems	
Signs of malnutrition		
Wounds, bruises and fractures	Signs of physical violence	
Baby's brain bleeds caused by shaking		
Signs of sexual maltreatment or rape		
Signs of physical punishment		
Burns		
Failure to provide medication	Neglect of a child's medical care	
Failing to attend to an injury		
Failure to provide pain relievers		
Bullying at school	Situations that threaten a child's or youth's mental and physical health	
Online bullying		
Bullying on the way to school or home		

As shown in Table 2, the qualitative data analysis produced the main category *Identifying signs and situations indicating child or youth maltreatment,* which involved the following categories: *parents' lacking care skills, nutritional problems, signs of physical violence, neglect of a child's medical care,* and *situations that threaten a child's or youth's mental and physical health.*

According to the respondents, parents' lacking care skills were visible as signs of decreased physical or mental wellbeing in the children or young people attending the emergency department. In the most severe cases, the parental care had seemed "non-existent" and led to the nurses report to the child protection services. The respondents had witness what they called "clueless parenting" or "newless helpless people", referring to helpless, unresourceful or lacking in basic life skills. Some parents seemed to live with emotional, social or cognitive problems. To quote two respondents, "Young parents, who are not yet able to take care of their

child. They lack the basic child care skills" (r2); "The parent's mental/physical capacity to care for the child is limited, which affects the child's mental and physical wellbeing) (r9).

The respondents noted that child maltreatment can result from an insecure mother-child relationship and lack of an attachment relationship. According to some respondents, they had seen an increasing number of children, whose basic trust has been damaged. They said, for example, "Pervasive physical, mental and social maltreatment of children and young people. Unfortunately, this is a growing problem, children are fearful and insecure. There are a lot of children and young people, who are not well for various reasons. Their families are abusive, they lack shelter, love, safety." (r10). Another respondent said, "The children have no safe parents to support them." (r27)

The respondents had also witnessed an increasing number of children or young people with nutritional deficiencies admitted to the emergency department. The situation was attributed to parents' failure to attend to the child's nutritional needs. Physical signs and symptoms of severe malnutrition could be detected in some cases. For example, "a 2-year-old with protruded bones and hollow eyes, the child was wan and feeble. The parents were drug users, they hadn't remembered to provide meals." (r34); "Abandoned, malnourished children" (r16).

Most commonly, the respondents had been alerted by direct signs of physical violence and maltreatment, for example by wounds, bruises, burns or fractures. To quote some of the respondents, "A suspicious fracture in a baby" (r8); "Signs of corporal punishment" (r15); "A suckling child had been shaken, the CT showed recent and older bleeds" *(*r45). In addition, the respondents had reported children or young people, who had experienced rape or incest. To their knowledge, abusers were often male relatives of the child. To quote, "A fracture in an infant – suspected sexual offense" (r19); "young girls, who had been raped" (r22).

In the experience of the respondents, cases of neglected medical care have increased. They had encountered children and young people, whose parents had failed to attend to their child's medication or injury. In the words of the respondents, "Parents, who have no interest in their children's issues. They had not adhered to the care or care plan. For example, in asthma care, they had not counted the puffs or given the medicine" (r3); "A youth in pain did not get pain relievers at home" (r9); "Paid no attention to an injury but let it deteriorate considerably" (r12). Last, according to the respondents, situations that threatened a children's or young people's mental and physical health included bullying at school or online. The respondents had witnessed young people, anxious and suffering as a result of bullying, brought to the emergency department by their parents. In addition, an increasing number of children or youth had been admitted due to physical violence and maltreatment that had occurred on the way to school or home. To quote, "Bullying at school, maltreatment at school or on the way to school" (r34); "Online persecution, taking pictures and sharing them online, causes anxiety in young people" (r38); "Sexual maltreatment, threats" (r45).

DISCUSSION

The results of the study showed that nursing staff at emergency departments find the identification of mental maltreatment in children or youth more challenging, compared to the detection of physical maltreatment. The results are comparable to earlier studies (Toros &

Tiirik 2014, Tiyyagura et al. 2017). According to Tiyyagura et al. (2017), the identification of mental maltreatment is difficult, because children may have limited communication skills, and because nurses encounter maltreatment relatively seldom. In addition, indicators of mental maltreatment are not as clear as signs of physical abuse and, although mental maltreatment is more common than physical maltreatment (Leppäkoski ym. 2023), these indicators may remain unnoticed. Screening tools have been developed for emergency departments to help detect signs of physical abuse (van Konijnenburg 2015).

The respondents in this study reported having observed lacking parenting skills. Similarly, Mullen (2023) describes how neglect of a child's needs and safety frequently leads to maltreatment of the child. According to Mullen, following physical abuse, neglect of care is the second most common form of maltreatment in children.

According to the respondents, detection of mental maltreatment or neglect of care was not easy due to the short care contacts at emergency departments. The respondents reported a need for further training on how to identify the various forms of child and youth maltreatment. Berchtolda et al. (2023), too, point out that the detection of maltreatment is challenging at emergency departments, because the staff lack knowledge of signs of maltreatment, or do not feel confident about their assessment skills. Kuang et al. (2018) propose that data should be collected on children and young people, who are repeatedly admitted to the emergency services. This information might help develop continuing education on the identification of maltreatment for the staff. Roberts et al. (2014) stress the importance of such education, since the staff at emergency departments encounter maltreated children and youth more commonly than any other nursing staff. In Finland, the national Institute for Health and Welfare and the Wellbeing Services Counties have collaborated in order to develop education on child maltreatment (https://thl.fi/tutkimus-ja-kehittaminen/tutkimukset-ja-hankkeet/barnahus-hanke). International training packages, funded by the European Union, are also available (https://www.entermentalhealth.net/ericakoulutus). A project named ERICA includes a mobile application helping to identify children's risk circumstances (https://projects.tuni.fi/erica/mobile-app/). It was developed a part of the clinical guidelines of the Nursing Research Foundation on the identification of risk circumstances (www.hotus.fi).

According to WHO (2022), the identification of maltreatment is challenging, because the offenders are most commonly family members, who are expected to take care of the children. The detection of mental maltreatment is especially difficult; even its definition is ambiguous (Baker et al. 2021). More clarifying work and counselling and support interventions are required to prevent child and youth maltreatment (WHO 2022). Nursing staff would benefit from training on child maltreatment, its causes and the associated risk factors. It is also essential that the effectiveness of the support and counselling interventions is evaluated.

CONCLUSIONS

Nursing staff at emergency departments are relatively well capable of identifying sings of physical maltreatment in children and young people, but they require continuing education on the detection of mental maltreatment and appropriate interventions. It is important that continuing education is develop to meet this need. It is equally important to focus on the prevention of maltreatment, for example by studying the risk circumstances described in the

clinical guidelines and by applying the knowledge in multiprofessional collaboration (Rantanen et al. 2022).

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