School nurse's screening for child maltreatment facilitates disclosure – A Swedish intervention study

Abstract

Early identification of child maltreatment (CM) is essential for children to receive support. The aim was to develop and evaluate a screening instrument for CM to be used by the school nurse in the health dialogue. The research questions included if victimisation could be disclosed by screening, if disclosure led to support measures, and the pupils' and the school nurses' experiences of the screening. A screening instrument to identify CM was developed. A total of 140 pupils and eleven school nurses participated. Mixed methods were used for analysis. Results showed that 29.7% of the participants disclosed CM victimisation and support was given when needed. Girls disclosed exposure to all types of maltreatment to a greater extent than boys. Pupils expressed the importance of screening and it created a trustful relation with the school nurse. No school nurses or pupils were distressed by the screening. Screening for CM facilitated disclosure.

Key words

Child maltreatment, intervention, school nurse, screening, disclosure, mixed methods

Dr Lisbet Engh, PhD, Division of Public Health Sciences, Department of Health Sciences, Karlstad University, Sweden

Dr Ulla-Britt Eriksson, associate professor, Division of Public Health Sciences, Department of Health Sciences, Karlstad University, Sweden

Dr Carolina Jernbro, associate professor, Division of Public Health Sciences, Department of Health Sciences, Karlstad University, Sweden

Email: carolina.jernbro@kau.se

Child maltreatment (CM) is a global public health problem with negative consequences on the child, the family and society (Gilbert et al, 2009). In 1979, Sweden was the first country in the world to ban CM which has led to a decrease in violence (Lucas and Janson, 2022). CM prevalence is difficult to estimate due to underreporting. Studies have shown that 5% of the pupils were exposed to systematic physical CM and many of them to polyvictimisation (Jernbro and Janson, 2017; Hafstad and Augusti, 2019). Early identification is essential for children to get the support they need and is cost-effective (Shonkoff, 2016). It prevents ill health during childhood and the need of health care in adulthood. Swedish legislation requires professionals who suspect CM to report immediately to social services. This requirement is unconditional but is not always fulfilled (Engh and Eriksson, 2015). One recent Swedish study showed that almost all school nurses have had experiences of pupils exposed to child abuse, but they do not always report to social services when they suspect abuse (Sundler et al, 2021).

Disclosing various forms of maltreatment has been described as a process (Foster and Hagedorn, 2014) and as a 'cruel paradox', which provides accessibility for support but on the other hand, there is a risk of not being believed or stigmatised and that the problems worsen (Bonanno et al, 2003). If the maltreatment is not disclosed these children are at risk for further victimisation and the possibility for support decreases (Foynes et al, 2009). The main obstacle to disclosure is lack of trust in adults (Jernbro et al, 2017). Building trust through various trust-building processes is thus an important task for the school nurse (Engh and Eriksson, 2015; Wilhsson et al, 2023). It is particularly difficult to disclose sexual abuse which takes an average of 17 years (Steine et al, 2016).

Disclosure can be facilitated if adults enquire (Schaeffer et al, 2011). Some children only disclose when an opportunity to reveal the maltreatment is available (Allnock and Miller, 2013). Other studies have shown that children want adults to be observant and to ask questions that enables disclosure (Lemaigre et al, 2017).

Routinely screening for CM within health care is unusual but requested (Government Offices of Sweden, 2015). A Swedish study (Engh and Eriksson, 2015) showed that school nurses enquired about exposure

to maltreatment if it was obvious that the child was maltreated. In another interview study (Wilhsson et al, 2023), school nurses highlight the significance of being willing to ask questions regarding exposure to violence. They observed that students who had encountered violence responded positively to such enquiries. Another study found that the professionals' emotional experiences became a challenge in identifying abused children, since it was difficult to face children's suffering caused by adults. The professionals felt that they betrayed the child if they did not identify ongoing abuse and doubted their own ability and competence (Albaek et al, 2020).

School nurses have unique opportunities to identify and work with pupils at risk of CM through their regular contacts with the pupils (e.g. during the statutory health visits containing health dialogues) (Engh and Eriksson, 2015; Harding et al, 2019). The school nurse is part of the school health service (SHS), which apart from medical health care also work with health promotion and prevention. The health dialogues include questions of physical, mental and social health as well as life circumstances and are carried out four times during schooling. The dialogues provide the school nurse with a comprehensive understanding of the pupil's health and life situation (Clausson et al, 2008) and promote the development of trusting relationships (Engh and Eriksson, 2015). CM can also be identified when asking about the general wellbeing and relationships (Engh and Eriksson, 2015).

School nurses and other staff within school are the most significant adults outside the family, who children disclose to (Linell, 2017). Adolescents want the adults to handle the disclosure seriously and to provide support (Jernbro et al, 2010). Few adolescents get upset or anxious when asked if they have been victimised (Zajac et al, 2011; Finkelhor et al, 2014).

To our knowledge, there are no previous studies on routinely screening for child maltreatment within the school health services. Therefore, the aims of this intervention study were to develop and evaluate a screening instrument for CM to be used by the school nurse in the health dialogue. The research questions were: Can the school nurse identify victimisation by screening and does it lead to support measures? What were the pupils' and the school nurses' experiences of the screening?

Table 1. Description of upper secondary education programmes for the 140 participating pupils, distributed by gender

Upper secondary education programme	Girls n (%)	Boys n (%)	Total n (%)
Vocational programme	27 (41.5)	43 (58.1)	70 (50.4)
Higher education preparatory programme	38 (58.5)	29 (39.2)	67 (48.2)
Introductory programme	0	1 (1.4)	1 (0.7)
Programmes for pupils with intellectual disabilities	0	1 (1.4)	1 (0.7)
Total	65 (46.8)	74 (53.2)*	139 (100)**

* For students who are not eligible for other upper secondary education programmes

** One boy did not state upper secondary education programme

Methods

Study design

To answer the research questions, mixed methods including both quantitative and qualitative data, were used (Tashakkori and Creswell, 2007). The intervention was carried out within the SHS and included the development of an oral screening instrument for CM to be used in the health dialogue between the school nurse and the pupil. The intervention was implemented in upper secondary schools in four municipalities in a Swedish county in the year 2020.

Sampling and data collection

The invitation to participate in the intervention was issued to all nine municipalities with upper secondary schools in a Swedish county. A total of 11 school nurses from four municipalities participated in the intervention. The school nurses had at least 2 years of work experience within the SHS, and were well acquainted with guidelines and routines for reporting suspected CM to social services. Prior to the data collection, a seminar was held for the participating school nurses on the current CM research and the implementation of the intervention.

The sample included pupils in upper secondary school (16–17 years of age). The pupils chosen for the study had reached the age where participation does not require consent from guardians. All pupils in classes who were scheduled for health dialogues with the school nurse in autumn 2020, were asked to participate in the study. A criterion for participation was that the pupil could read and understand Swedish.

When the intervention was about to start in the first quarter of 2020, the COVID-19 pandemic broke out, and the intervention was postponed. The seminar for participating school nurses was held digitally.

The screening of CM was done during the regular health dialogue in the school nurses' office. The CM screening lasted for 5 to 10 minutes depending on disclosure and support need. Only the participant and the school nurse were present. No audio or visual recording was used during the visit.

Description of study population

A total of 167 pupils were asked to participate in the study and 27 declined participation. Girls declined to participate to a greater extent than boys. A total of 140 pupils participated, 65 girls (46%) and 75 boys (54%). The distribution of upper secondary education programmes of the participating pupils is shown in *Table 1*. More boys than girls were enrolled in vocational programmes, while more girls than boys were in higher education preparatory programmes.

Measures

Child maltreatment screening instrument

The screening instrument included seven questions about exposure to six different types of CM including online abuse. The construction and order of the questions were determined after a discussion with experienced researchers and school nurses. The questions were broadly formulated, since the intention of the screening was to initiate a dialogue about the experiences of CM. The questions were asked orally and the school nurse could follow up with in-depth questions in case of disclosure. An open-ended question about how the pupils experienced the screening was included and documented by the school nurse.

- Neglect was measured using the following questions: (1) Do you feel relaxed and safe at home? (2) Do you feel cared for and loved by your parents?
- Emotional abuse was measured by the following question: Has a parent or another adult in your family treated you in a condescending way that made you feel uncomfortable?
- Witnessing intimate partner violence (IPV) was assessed by the following question: Have you heard or seen someone in your family being beaten (siblings or parent)?
- Physical abuse was measured by the following question: Have you been beaten or harmed by any of your parents or another adult in your family?
- Sexual abuse was assessed by the following question: Has anyone touched your body in an inappropriate way?
- Online abuse was measured by the following question: Have you been exposed to any offensive experience on the internet (e.g. threats, insults, sexual invitations)?
- There were three response alternatives for all questions: (1) Yes, (2) No, (3) Do not want to answer/refrain from answering.
- Any victimisation was coded if the pupil had been exposed to any of the types of abuse described above.
- Polyvictimisation was coded if the pupil had been exposed to two or more of the types of abuse above.

The school nurses' assessment

After the health dialogue, the school nurses documented the pupils' exposure to violence and measures taken (e.g. report to social services). The school nurses also documented their reflections of the child maltreatment screening.

The school nurses' documentation from the screening including the experiences of the pupils and school nurses' assessments were sent to the research team together with the written consent from the pupils.

Analysis

In this study, the quantitative and qualitative methods were kept separate during the data analysis and were integrated when interpreting the results. The quantitative analysis of the CM screening was performed in SPSS for Windows version 25. The qualitative data from the school nurses' documentation of pupil experiences of the screening were analysed with qualitative content analysis according to Graneheim and Lundman (2004). Meaning units were identified, condensed and coded, and subsequently grouped into subcategories and categories.

Ethical considerations

The pupils received written and oral information about the study's purpose, the right to refrain from answering any question and about the possibility to withdraw participation at any time without any consequences. The pupils were encouraged to seek support from the school nurse or another person within the SHS if they experienced anxiety after the health dialogue. Only the school nurse and the researchers knew the pupil's identity. All completed questionnaires were de-identified and coded before data were compiled. The study was approved by the regional ethics committee (Dnr 2019–05274).

Results

Pupils' disclosure of child maltreatment

Pupils' disclosure of CM is shown in *Table 2*. All pupils said they felt safe at home and most also felt cared for and loved by their parents showing that few were neglected (1.4%). Of the total, 29.7% disclosed any

Table 2. The pupils' disclosure of different types of child maltreatment including online abuse, distributed by gender

Type of abuse	Total population n (%)	Girls n (%)	Boys n (%)
Neglect	2 (1.4)	2 (3.1)	0 (0)
Emotional abuse	11 (7.9)	9 (13.8)	2 (2.7)
Witnessing IPV	7 (5.0)	5 (7.7)	2 (2.7)
Physical abuse	11 (7.9)	8 (12.3)	3 (4.0)
Sexual abuse	12 (8.6)	11 (16.9)	1 (1.3)
Online abuse	29 (20.7)	20 (30.8)	9 (12.0)
Any victimisation (of the above)	41 (29.7)	29 (46.0)	12 (16.0)
Polyvictimisation (exposure to 2 or more types)	17 (12.3)	13 (20.6)	4 (5.3)

Table 3. Pupils' reflections on the screening for CM, main categories and subcategories

Importance of screening	A sensitive topic	Adequate questions create trust
Understanding of the screening	No arousal of negative feelings	The dialogue creates confidence
Early detection facilitate support	Idea that others will be upset	The dialogue creates a feeling of genuine interest from the school nurse
Prevention of negative consequences	Pushed unpleasant memories away	Importance of honesty

victimisation, for girls the prevalence was 46%. Online abuse was disclosed more frequently than other types of victimisation (20.7%). Girls disclosed significantly more exposure to all types of CM compared to boys. Of those disclosing CM, 41% reported exposure to two or more types of abuse (polyvictimisation) (e.g. all pupils disclosing physical abuse were polyvictims [not shown in table]).

Pupils' reflections on the CM screening

The pupils were also enquired by the school nurse about their views on the screening. All pupils commented on this open question. The qualitative content analysis is presented in *Table 3*. The main categories were:

- Importance of screening
- A sensitive topic
- Adequate questions create trust.

Importance of screening

Pupils expressed that it was important to enquire and showed an understanding of why this is done. Pupils stated: 'I think it's good that they enquire' and 'It is important to capture'. The pupils also meant that by screening for CM, early detection can be made and thus also a possibility for support which prevents negative consequences.

A sensitive topic

The screening did not arouse negative feelings among the participants themselves, but they were aware of that the screening of CM could be sensitive and create anxiety in other pupils. Further, the pupils also expressed that it is normal to try to repress and forget memories of CM, since it arouses unpleasant feelings.

Adequate questions create trust

The pupils expressed that the questions were suitable and easy to understand. They felt that the adults who asked were genuinely interested in their situation, which contributed to feelings of trust and safety. They could be honest and open.

The school nurse's assessment of the dialogue and measures taken

The comments from the school nurses showed that they followed up if the pupils disclosed CM. Many of the victimised pupils already received support. In some cases, the abuse was assessed as less severe or happened earlier in their childhood as shown by the following quote by a pupil:

> *'Once, I was thrown to the floor by my dad. He wrestled me down after I did something stupid. It never happened again.'*

For another pupil who had been exposed between the ages of 7 and 8, child and adolescent psychiatry as well as social services and police had been involved but it was a non-profit organisation that gave the best support. The online abuse was described as consisting of various forms of threats and aggression. Pupils had been contacted by older men, had received photos of their genitals and other 'disgusting' pictures and received sexual invitations. One pupil said:

> *'… Someone asked me to send a picture of my genitals. I didn't.'*

According to the school nurse, the pupil in question had not experienced this incident as particularly problematic.

In nine cases (eight girls and one boy), the school nurse took further action such as: follow-up at the school nurse, referral to the school doctor or the counsellor within the SHS-team, other school staff or external contacts. The school nurse did not contact the caregiver, the headmaster, social services or the police in any of the cases.

Two school nurses reported that a couple of pupils who did not disclose CM during screening at the health dialogue returned later for disclosure.

School nurses' reflections on CM screening

All school nurses reported that they had positive experiences of the screening for CM in the health dialogues and did not find it uncomfortable. They meant that the dialogues were held in a good atmosphere and they assessed the pupils' responses as sincere. Only one girl showed intense emotions during the dialogue.

Discussion

The study showed that CM screening during the health dialogue creates trust, openness and a will to disclose, confirmed by previous studies (Engh and Eriksson, 2015; Schaeffer et al, 2011). The results of this study, in line with previous studies (Jernbro and Janson, 2017) found that girls disclosed different types of CM to a larger extent compared to boys. The fact that some pupils returned to the school nurse later to disclose CM shows the importance of direct questions about CM. The victim may take some time to fully comprehend

the victimisation. The child chooses when, where and to whom to report the maltreatment (Schaeffer et al, 2011). The study suggests that the health dialogue helps the school nurse to establish a trusting relationship with the pupil, which other studies have shown (Engh and Eriksson, 2015; Wilhsson et al, 2023). The pupils showed an understanding that screening can promote early detection of CM and prevent future negative health consequences, such as mental illness.

Suspicion or disclosure of a child's exposure to CM can provoke strong emotional reactions among professionals. Therefore, it is important that the school nurse is supported by her employer and has access to supervision. Professionals need knowledge to interpret signs, to be aware of emotional reactions when children disclose CM, and to act accordingly. Also, it is of importance that professionals have confidence in the social services and other support systems around maltreated children (Engh and Eriksson, 2015; Wilhsson et al, 2023). The reason why the school nurses did not report disclosed CM to social services, which Swedish legislation requires, was due to the fact that help and support was already initiated or that the exposure was in the past. The results might have been different if younger children had participated.

In the current study pupils were not upset by the CM screening, also previously shown by Finkelhor et al (2014). The pupils disclosed abuse even though they were not anonymous. The school nurses perceived that they received honest and sincere responses from pupils. The proportion of CM disclosures in this study reflected the prevalence of CM in a nationally representative Swedish study (Jernbro et al, 2017). However, in this study it is not known how many who refrained from disclosure. Feelings of shame may be a reason why CM is not disclosed (Rahm et al, 2006).

A notable result was the large proportion of pupils who reported being exposed to online abuse such as threats, violations or sexual harassment. This finding underscores the importance of pupils getting support at school to deal with these negative experiences.

Strengths and limitations

The seven questions used in the health dialogue were partly based on previously validated instruments used in a Swedish national survey on CM (Jernbro and Janson, 2017) and finalised in dialogue with school nurses and researchers. The questions were designed for a health dialogue with the opportunity of follow-up questions. The questions may not have been suitable for a survey because of the breadth of the questions. The pupils reported to the school nurse during the health dialogue that they thought the questions were easy to understand, which strengthens the design of the questions.

Despite repeated contacts, five municipalities declined participation due to lack of time, staff turnover or prioritisation of other assigned tasks, such as drug tests. Asking specifically about exposure to violence arouses emotions and is taboo (Albaek et al, 2020; Engh and Eriksson, 2015; Engh et al, 2017), which may also have contributed to a decline to participate. However, the participating school nurses stated that it was not time-consuming to ask questions about violence. They even expressed that it saved time as the dialogues contributed to an in-depth relationship with the pupil.

The study was carried out in upper secondary school and those who responded were aged 16. The result should be interpreted with caution and cannot be directly generalised to other age groups. However, the screening instrument could be developed to be used in dialogues with younger pupils. Also, the instrument can be expanded to include more forms of violence, specifically violence in adolescent intimate relationships and honour-related violence.

Conclusions

The study shows that screening for CM in the health dialogue facilitates disclosure. The pupils sensed that the adults who enquired were genuinely interested in their situation, fostering a trusting relationship. The findings imply that professionals' awareness of child maltreatment, including emotional responses, is crucial for posing sensitive questions, interpreting signs, and responding appropriately when pupils disclose. The study demonstrates the value of screening for CM and the findings suggest that it would be beneficial to include it in the regular health dialogues with all pupils to be able to detect maltreatment, act and prevent future negative health consequences. Further research is needed to investigate whether the screening can also lead to early disclosure. **CHHE**

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KEY POINTS

- School nurses' screening for child maltreatment can facilitate disclosure.
- School nurses and pupils were not distressed by the screening for child maltreatment.
- Screening can contribute to a trusting relationship between the pupil and the school nurse.
- Further research is needed to investigate whether screening can lead to early disclosure at younger ages.

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