

How Training Impacts the Identification and Discussion of the Risks of Child Maltreatment: A Finnish Follow-Up Study

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Abstract

The aim of our study was to explore whether training could improve employees' knowledge of and attitudes towards identifying and handling child maltreatment. We hypothesized that professionals' abilities and attitudes in querying and reporting child maltreatment would improve after training. The training was designed according to the baseline study results as a national web-based training program addressing practical personnel needs. To capture a better impression of the employees' views, both quantitative and qualitative methods were utilized. The knowledge and attitudes of professionals were assessed using an anonymous self-assessment questionnaire developed for this study. In the baseline study, a total of 167 participants (38%) completed the survey. In the follow-up study, a total of 96 participants (48%) completed the survey. Overall, a small positive change occurred between the study periods. With certain reservations, we will present the finding that further training on the identification, reporting and collaboration of child maltreatment improves professionals' knowledge. Training increases their comfort and ease in discussing and reporting this sensitive and complex phenomenon. Most importantly, the employees were aware of their own shortcomings in identifying and dealing with child maltreatment.

Keywords: Child maltreatment; BCAP; follow-up study; web-based training

Introduction

Child maltreatment is a serious health problem. It can take the form of physical and sexual abuse, neglect, and emotional maltreatment [1]. The most common form of child maltreatment is neglect [2]. The impact of child maltreatment on child well-being is significant, involving substantial physical, psychological and behavioral harm [3]. WHO (2016) recommends in their INSPIRE Program that all countries aim to decrease child maltreatment as much as possible [1].

However, child maltreatment has not been eradicated worldwide. A systematic review by Hillis et al. [4] showed that globally, one billion children aged two to 17 have experienced various forms of maltreatment during the past year. In Europe, these children are estimated to total about 80 million. Stoltenborgh et al. [5] found that the overall estimated prevalence rates for self-reported studies were 12.7 percent for sexual abuse, 22.6 percent for physical abuse and 33.3 percent for emotional abuse.

In Finland, at the beginning of April 2015, an amendment to the Child Welfare Act (1302/2014) [6] came into effect, which extended the reporting obligation in cases where an offence against a child's life or health is suspected. In 2017, the number of child victims was 6,600, comprising 20 percent of all victims of assault offences. Of child victims of assault offences, 4,350 (65.8%) were boys and 2,260 (34.2%) were girls. Of the 1,070 victims of child sexual abuse, 87.5 percent were girls and 12.5 percent were boys [7]. However, not all maltreatment cases can be substantiated or they will not be revealed and reported to the authorities [8,1]. Further, professionals' knowledge

and attitudes about their duties to report child maltreatment may be poorly understood [9].

Professionals may believe the report should be filed by someone other than the person with firsthand knowledge or they are unaware of their agency's written protocols regarding the reporting of child maltreatment [10,11]. Eisbach et al. [12] found that nurses hesitated when the signs and symptoms were subtle or when physical evidence was not an obvious or primary finding.

Moreover, studies have found that many professionals feel that they have not had sufficient training to detect child maltreatment and report it [13,14]. They have also lacked specific knowledge [15,16] or they did not have the skills and support to take action in keeping children safe [15]. Foster et al. [17] found that the large proportions of health care professionals feel uncomfortable discussing maltreatment history, and lack knowledge about community resources. In addition, updated guidelines, including practical advice on how to deal with child maltreatment [18,11], as well as systematic risk assessment practices [19], are still needed.

Thus, many studies [20-24,10,11,13,14] support the continuing need for training on child maltreatment. For example, professionals from a range of fields need clinical and/or practical skills and judgement to decide if a child's injuries are due to maltreatment [24], and multiprofessional training that provides knowledge about the roles of each agency [25], as well as cross-agency information sharing [10].

Alvarez et al. [20] indicated that training participants demonstrated significant improvement in their knowledge of child maltreatment reporting laws, accuracy in recognizing child maltreatment, and clinical expertise reporting. Lee et al. [14] showed that a nurse training program improved the attitude, knowledge and self-efficacy of nurses in reporting child maltreatment. However, McTavish et al. [23] suggested that reporters need better support for the reporting process at many levels, e.g. personally, interpersonally and institutionally. Thereby, collegial support and better cooperation are needed [25,11], as well as

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clinical supervision [26,27] when managing child maltreatment.

Moreover, successful intervention requires the involvement and collaboration of various professionals. Davidov et al. [28] suggested that because the phenomenon is complex, ambiguous and holistic in nature, the need to work in a cross-disciplinary manner is crucial. However, a lack of communication between professionals can obstruct a fast and efficient approach to child abuse [29]. In child protection cases, cooperation may be minor and unconventional in nature [30] or intervention cultures between different stakeholders may vary [31].

Study aim with accompanying research questions

The aim of our study was to explore whether the training could improve employees' knowledge of and attitudes towards identifying and handling child maltreatment.

We hypothesized those professionals' abilities and attitudes in suspecting, querying and reporting child maltreatment would improve after the training. The following research questions were considered:

- How did the training improve health care professionals' abilities to identify child maltreatment?
- How did the training improve health care professionals' attitudes toward discussing child maltreatment?
- How did the training affect employees' ability to work in a multidisciplinary manner?

Methods

To capture a better impression of the employees' views, both quantitative and qualitative methods (mixed methods) were used in a follow-up design before and after the training, including launching a validated identification tool for assessing parental child maltreatment (BCAP, Brief Child Abuse Potential Inventory) [32].

Data collection

The knowledge and attitudes of professionals were assessed using an anonymous self-assessment questionnaire developed for this study. This questionnaire was based on the Finnish National Guideline of efficient methods for identifying child maltreatment in social and health care [33], including a Finnish legislation (e.g. 417/2007; 1302/2014) and earlier literature review. The questionnaire contained demographic questions, a question related to the employee's concerns about the child's well-being, issues related to the employee's experiences in suspecting the risk of child maltreatment, and professionals' practical knowledge and attitudes when they discuss and report child maltreatment. Most of the questions were structured, multiple-choice questions with several answer options. There were also some open-ended and open questions to obtain more detailed information about employees' experiences when they deal with child maltreatment.

The surveys were conducted in the form of a computer-aided questionnaire. The surveys were administered by the Project Manager and delivered to participants through their immediate superiors. In the baseline study, a total of 167 participants (38%) completed the survey. In the follow-up study, a total of 96 participants completed the survey, resulting in a response rate of 48 percent. Participation was voluntary and anonymous. This study was approved by the Ethics Committee of the Pirkanmaa Hospital District (R11198H).

Before conducting the baseline study, a pilot test of the electronic version was carried out with 20 employees, including social workers, day care workers and public health nurses. Some questions were then modified by categorizing some variables to ensure clarity and readability.

Training program

A blended learning method was used consisting of self-directed reading during working hours, practical training and reflecting on work experiences during the nurses' ward meetings. The learning process lasted six to 18 months depending on the health care unit or hospital unit situation. The reading material consisted of the Finnish National Guideline on efficient methods for ... (2015), early broaching of worrisome subjects concerning a child or adolescent with parents or guardians [34] adapted in a health care context, documentation guidelines, local protocols regarding child maltreatment, and information about local and national third-sector support services.

A web-based training program about child maltreatment was launched for professionals in autumn 2017 by the National Institute for Health and Welfare. The training program used the contents of that program regarding identifying child maltreatment, attitude building, the law section and multi-professional cooperation principles. This training program was offered to 29 multiprofessional team members working in the social and health care units in question, that is nurses, head nurses, nursing directors, doctors, social workers and psychologists. It was only mandatory for the group of nursing professionals and considered part of the training.

Analysis

Before the analysis, distributions and percentages were calculated for each variable. After that, demographic variables were compared between groups using Chi-square tests. Second, the responses of baseline and follow-up personnel were compared with Chi-square analysis. The accepted level of statistical significance was set at 0.05. Additionally, the frequencies for some of the variables were categorized / combined into two or three classes when the numbers of frequencies in the classes were too small to be analyzed. In addition, the reliability of the Likert-scale format question was measured by Cronbach's alpha coefficient, which tests for internal consistency on questions seeking professionals' opinions on how to discuss and deal with child maltreatment. The Cronbach's alpha for the scale was 0.797. The reliability coefficient ranged from zero to one. The figure could therefore be considered good [35]. Further, the distribution of the professionals' opinions was illustrated by a mean score. A statistical analysis was performed using SPSS for Windows 22.0.

The answers to the open questions were grouped and calculated, and direct citations were also used to describe and deepen the quantitative results concerning professionals' experiences in suspecting and dealing with child maltreatment.

Study results

The research groups were quite similar in character, although only nine participants of 95 (9.5%) reported that they had also participated in the baseline study. However, social and health care representatives participated more in the follow-up study (.033) (Table 1).

Overall, the follow-up group participants reported that they had received more training about child maltreatment (.003). Moreover, the participants in the follow-up group reported having less training needs than the baseline participants (.000) (Table 1). However, a clear majority of the employees of both groups, 87.6 percent from the baseline study (n = 141 of 161) and 81.5 percent of the follow-up study (n = 75 of 92), reported a lack of special expertise in the field of child maltreatment.

Further, in the follow-up group, there were more trained employees working in social and health care services than in early childhood education (.000) (Table 2). Fourteen people of 29 participated in the web-based training program. They were all social and health care professionals. Three of them had undergone the entire training program.

Table 1: Demographic characteristics.

Variable		Baseline (N =167)	Follow-up (N = 96)	Chi square test		
		No. (%)	No. (%)	χ^2 -value	degree of freedom =df	p-value
Age group						
	≤ 25	14 (8.4)	6 (6.3)			
	26 - 35	53 (31.7)	35 (36.5)			
	36 - 45	41(24.6)	20 (20.8)			
	46 - 55	38 (22.8)	20 (20.8)			
	56 ≥	21(12.6)	15 (15.6)			
	Total	167 (100.0)	96 (100.0)	1.651	4	.800
Job title						
	Nurses, public health nurses, midwives, etc.	93 (55.7)	64 (66.7)			
	Teachers in early childhood education	60 (35.9)	20 (20.8)			
	Social workers	14 (8.4)	12 (12.5)			
	Total	167 (100.0)	96 (100.0)	6.842	2	.033
Years of current practice						
	≤ 5	51(30.5)	26 (27.1)			
	6 - 15	61 (36.5)	34 (35.4)			
	≥ 16	55 (32.9)	36 (37.5)			
	Total	167 (100.0)	96 (100.0)	.637	2	.727
Workplace						
	Social and Health Services	95 (56.9)	57 (59.4)			
	Early Childhood Education	72 (43.1)	39 (40.6)			
	Total	167 (100.0)	96 (100.0)	.155	1	.694
Years of current workplace						
	≤ 5	82 (49.1)	46 (47.9)			
	6-15	51 (30.5)	26 (27.1)			
	≥ 16	34 (20.4)	24 (25.0)			
	Total	167 (100.0)	96 (100.0)	.862	2	.650
Training (overall) about child maltreatment						
	Yes	80 (48.5)	64 (67.4)			
	No training	85 (51.5)	31 (32.6)			
	Total	165 (100.0)	95 (100.0)	8.700	1	.003
Amount of training						
	≤ 10 hours	68 (41.2)	57 (60.0)			
	≥ 10 hours	12 (7.3)	7 (7.4)			
	No training	85 (51.5)	31 (32.6)			
	Total	165 (100.0)	95 (100.0)	9.246	2	.010
Need for further training						
	Yes	154 (93.9)	60 (65.9)			
	No	10 (6.1)	31 (34.1)			
	Total	164 (100.0)	91 (100.0)	33.928	1	.000

Table 2: Associations between some variables and the opinions of the employees in the baseline (n = 167) and the follow-up (n = 96).

		Baseline (N=167)			Chi square test			Follow-up (N=96)			Chi square test		
		Social and Health Services (n=95) No. (%)	Early Childhood Education (n=72) No. (%)	χ^2 -value	degree of freedom =df	p-value	Social and Health Services (n=57) No. (%)	Early Childhood Education (n=39) No. (%)	χ^2 -value	degree of freedom =df	p-value		
Receiving training about child maltreatment	Yes	43 (45.3)	38 (52.8)				49 (86.0)	15 (39.5)					
	No	52 (54.7)	34 (47.2)	.926	1	.336	8 (14.0)	23 (60.5)	22.417	1	.000		
	Total	95 (100.0)	72 (100.0)				57 (100.0)	38 (100.0)					
Encountering families where the risk of child maltreatment is suspected	Once in two months or more often	62 (65.3)	16 (22.2)				39 (68.4)	10 (26.3)					
	Once a year or less often or until now, not once	33 (34.7)	56 (77.8)	30.483	1	.000	18 (31.6)	28 (73.7)	16.185	1	.000		
	Total	95 (100.0)	72 (100.0)				57 (100.0)	38 (100.0)					
Using the tools for identifying and intervening in child maltreatment	Disagree	29 (30.5)	21 (29.2)				12 (22.2)	8 (21.1)					
	Not agree or disagree	22 (23.2)	24 (33.3)				9 (16.7)	16 (42.1)					
	Agree	44 (46.3)	27 (37.5)	2.314	2	.314	33 (61.1)	14 (36.8)	7.897	2	.019		
	Total	95 (100.0)	72 (100.0)				54 (100.0)	38 (100.0)					

Table 3: Distribution of employees' concerns according to the baseline (N=167) and follow-up participants (N= 96)

Concerns that raise employees' suspicions	Baseline No. (%)	Follow-up No. (%)
1. Child's behavior, such as restlessness or teasing	132 (12.8)	75 (12.4)
2. Childhood development decline, poor school success or health problems	144 (13.1)	86 (14.3)
3. Childhood mental disorder, such as depression or fit of rage	152 (14.8)	92 (15.3)
4. Deficiencies in the implementation of parenthood, such as the neglect of child custody	164 (15.9)	95 (15.8)
5. Issues related to the maintenance of parents, such as powerlessness, mental health and/or substance abuse problems	162 (15.7)	95 (15.8)
6. Matters related to child and parent interaction, such as ignorance of a child or violence	161(15.6)	93 (15.4)
7. Matters related to interaction between parents and employees, such as cooperation problems	100 9.7	63 (10.4)
8. Any other matter not mentioned above	11 (1.0)	4 (0.7)
Total	1026 (100.0)	603 (100.0)

Identifying the risk of child maltreatment

The study participants were asked to choose all the appropriate answer options that raise suspicion that something is wrong or amiss in a child's life. In both phases, just over two-fifths of the concerns (Table 3; points 1–3) were so-called child-related risk factors. Approximately half of the concerns (points 4–6) were parent-related and/or family-related risk factors. The rest of the concerns targeted cooperation problems between parents and employees, (point 6) (Table 3).

Further, the employees assessed how often they would encounter those families where they suspected a risk of child maltreatment. The employees in the baseline and follow-up groups reported that they had encountered risk families as often (.475). In the baseline study, 47 percent of the employees (n = 78 of 166), and 51 percent of the follow-up employees (n = 48 of 95) had encountered these risk families at most "once every two months".

In both study phases, the employees in social and health care services reported that they had encountered suspected risk families more often than those working in early childhood education (.000) (Table 2).

Further, the participants were asked through a structured question about the sources on which they had based their suspicions of child maltreatment.

The suspected cases were based on less than one-third of cases in the baseline group and over one-third of cases in the follow-up group when the world around the child had given signs that everything was not well (this can be called employee's intuition) (Table 4).

Figure 1 shows that neglect was the greatest form of suspected maltreatment in both phases: just over two-fifths in the baseline group and just over half in the follow-up group. Sexual exploitation (abuse) was the least suspected form of maltreatment (Figure 1).

With the open question, the participants were asked what factors could trigger an employee's suspicion that a child was at risk of being maltreated. Attention was focused on the following issues: a child's physical injuries, a child's behavior (weeping, nervous, aggressive), a child's vague symptoms or parents who did not explain how injuries occurred, when injuries and the parents' story were not congruent, when the child-parent interaction provided references (e.g. parents did not visit the hospital to look at a child, and parents' intolerance in dealing with a child), parents' fatigue, mental health and substance abuse problems.

Between the study phases, there were no significant changes in the employees' opinions in relation to identifying child maltreatment (p = .431). Seventy percent of the baseline participants (n = 116 of 166) and three-quarters of the follow-up participants (n = 70 of 94) disagreed that "Identifying the risk of child maltreatment is easy".

Discussing and reporting child maltreatment

In both study phases, the vast majority of the employees in the

baseline group (87%; n = 144 of 166) and the follow-up group (88%; n = 82 of 93) agreed that it is difficult to discuss child maltreatment.

The participants rated the 19 statements concerning their attitudes toward discussing and dealing with child maltreatment (Table 5). Generally, no significant differences were found in the respondents' opinions between the two research periods. It was observed that 98 percent of the baseline participants and 98 percent of the follow-up respondents agreed ("partially or completely agreed") that "Discussing child maltreatment is part of my professional duty" (statement 3). Nevertheless, 90.4 percent of the baseline participants and 95.7 percent of the follow-up respondents agreed that "I want to proceed unhurriedly/slowly before I ask about child maltreatment" (statement 2). Moreover, 76.9 percent of the baseline participants and 79.8 percent of the follow-up respondents agreed that "I want more objective evidence by asking more questions before I intervene in child maltreatment" (statement 12). Further, a little less than half of the baseline participants (48.1%) and slightly over half of the follow-up participants (54%) agreed that "When I suspect, I directly ask about child maltreatment" (statement 11).

The participants were asked through an open question how they acted when they wanted to proceed unhurriedly/slowly. In most cases, child maltreatment suspicions are first handled in the work team through discussions with a doctor, a social worker and/or some other authority or a superior, for example. The employee writes down her/his findings and/or observations, interviews the child's parents, and possibly asks for a re-appointment/visit. The behavior of the child is also monitored. Responses did not indicate how long a family or child is under surveillance before an employee takes the child's maltreatment up for discussion. For example, the following expressions were raised: "I express my concern about the child to the parents gradually by planning and thinking about how to proceed" or "If contusions begin to appear regularly, that is the time to take the matter into discussion".

The participants were also asked if they had used the tools for identifying and intervening in child maltreatment (statement 6). In both study phases, over a quarter of respondents (27%) answered "Do not agree or disagree" (Table 5). There was no difference between the opinions of baseline and follow-up employees regarding the use of tools (.314). In the follow-up study, among social and health care professionals there were more respondents who agreed (.019) (Table 2).

Further, the employees were asked what kinds of identification and intervention tools they had used. Discussion with a child, with a parent or with a co-worker was mentioned on almost half of the reply forms (46%; n = 31 of 67). Observation as a tool was mentioned in more than every fourth reply form (26.8%; n = 18 of 67). The following expressions were raised: "I follow a child's play" or "I follow whether the child's behavior has changed". Every sixth respondent (16%; n = 11 of 67) made it clear that the unit has a guideline or protocol for how to identify and intervene in child maltreatment. In the follow-up study, 22 percent (21 of 96) answered the question. Discussion, observation

Table 4: Distribution of the employees' suspicions of child maltreatment

Sources of employee's suspicions	Baseline study No. (%)	Follow-up study No. (%)
The world around the child has given signs that everything is not well ("employees' intuition")	109 (28.8)	75 (35.2)
The child or his/her parents declare themselves	91 (24.1)	48 (22.5)
Information has come from the co-worker or another authority	87 (23.0)	48 (22.5)
The employee detects the signs of abuse in the child, such as bruises	57 (15.1)	21 (9.9)
An anonymous notice received from a close relative or neighbor	34 (9.0)	21 (9.9)
Total	378 (100.0)	213 (100.0)

Table 5: Distribution of the professionals' perceptions concerning how to discuss and deal with child maltreatment

Statements 1–19	No. of respondents / size of the whole samples	1 Completely disagree n (%)	2 Partially disagree n (%)	3 Not agree or disagree n (%)	4 Partially agree n (%)	5 Completely agree n (%)	Mean scores
1. I'm not afraid of the guardian's indignation and I'm going to talk	Baseline (n=166/167)	10 (6.0)	57 (34.3)	5 (3.0)	66 (39.8)	28 (16.9)	3.27
	Follow-up (n=95/96)	3 (3.2)	41 (43.2)	12 (12.6)	39 (41.1)	-	2.92
2. I want to proceed evenly/ quietly/unhurriedly before I ask for child maltreatment	Baseline (n=167/167)	2 (1.2)	9 (5.4)	5 (3.0)	56 (33.5)	95 (56.9)	4.40
	Follow-up (n=95/96)	3 (3.2)	-	1 (1.1)	38 (40.0)	53 (55.8)	4.48
3. Talking about child maltreatment is part of my professional duty	Baseline (n=167/167)	1 (0.6)	-	3 (1.8)	18 (10.8)	145 (86.8)	4.83
	Follow-up (n=95/96)	1 (1.1)	-	1 (1.1)	11 (11.6)	82 (86.3)	4.82
4. The fear of a "wrong diagnosis" may prevent me from asking for maltreatment	Baseline (n=167/167)	20 (12.0)	30 (18.0)	5 (3.0)	88 (52.7)	24 (14.4)	3.40
	Follow-up (n=95/96)	11 (11.6)	24 (25.3)	3 (3.2)	48 (50.5)	9 (9.5)	3.21
5. Lacking workmates/superior's support may prevent me from enquiring about child maltreatment	Baseline (n=167/167)	57 (34.3)	35 (21.1)	10 (6.0)	46 (27.7)	18 (10.8)	2.60
	Follow-up (n=95/96)	36 (37.9)	23 (24.2)	8 (8.4)	22 (23.2)	6 (6.3)	2.36
6. I use the tools for identifying and intervening in child maltreatment	Baseline (n=167/167)	20 (12.0)	30 (18.0)	46 (27.5)	52 (31.1)	19 (11.4)	3.12
	Follow-up (n=92/96)	9 (9.8)	11 (12.0)	25 (27.2)	32 (34.8)	15 (16.3)	3.36
7. Parents' inability to cooperate may prevent me from intervening in child maltreatment	Baseline (n=167/167)	20 (12.0)	36 (21.6)	10 (6.0)	75 (44.9)	26 (15.6)	3.31
	Follow-up (n=94/96)	12 (12.8)	13 (13.8)	6 (6.4)	47 (50.0)	16 (17.0)	3.45
8. I would rather guide the family to another helper than intervene in child maltreatment	Baseline (n=167/167)	52 (31.1)	59 (35.3)	9 (5.4)	41 (24.6)	6 (3.6)	2.34
	Follow-up (n=94/96)	30 (31.9)	37 (39.4)	6 (6.4)	17 (18.1)	4 (4.3)	2.23
9. I'm afraid that the trust between parents and I will be compromised and I drop the matter	Baseline (n=167/167)	82 (49.1)	55 (32.9)	8 (4.8)	20 (12.0)	2 (1.2)	1.83
	Follow-up (n=93/96)	47 (50.5)	29 (31.2)	4 (4.3)	11 (11.8)	2 (2.2)	1.84
10. I barely know the legislation and I do not intervene in child maltreatment	Baseline (n=166/167)	73 (44.0)	55 (33.1)	15 (9.0)	21 (12.7)	2 (1.2)	1.94
	Follow-up (n=93/96)	43 (46.2)	30 (32.3)	6 (6.5)	13 (14.0)	1 (1.1)	1.91
11. When I suspect, I directly ask about child maltreatment	Baseline (n=166/167)	21 (12.7)	55 (33.1)	10 (6.0)	60 (36.1)	20 (12.0)	3.02
	Follow-up (n=94/96)	7 (7.4)	28 (29.8)	8 (8.5)	40 (42.6)	11 (11.7)	3.21
12. I want more objective evidence by asking more questions before I intervene in it	Baseline (n=165/167)	3 (1.8)	23 (13.9)	12 (7.3)	83 (50.3)	44 (26.7)	3.86
	Follow-up (n=94/96)	4 (4.3)	9 (9.6)	6 (6.4)	48 (51.5)	27 (28.7)	3.90
13. I'm afraid that raising the issue brings more problems because I do not have enough time to deal with the matter with the parents	Baseline (n=165/167)	49 (29.7)	42 (25.5)	10 (6.1)	47 (28.5)	17 (10.3)	2.64
	Follow-up (n=94/96)	19 (20.2)	27 (28.7)	8 (8.5)	30 (31.9)	10 (10.6)	2.84
14. The fact that the child's parents are foreign (i.e. cultural difference, language barrier) make it difficult to intervene	Baseline (n=165/167)	14 (8.5)	18 (10.9)	15 (9.1)	61 (37.0)	57 (34.5)	3.78
	Follow-up (n=94/96)	6 (6.4)	10 (10.6)	8 (8.5)	40 (42.6)	30 (31.9)	3.83
15. The difficulty of expressing the matter with the right words can prevent me from speaking on the matter	Baseline (n=164/167)	43 (26.2)	41 (25.0)	11 (6.7)	45 (27.4)	24 (14.6)	2.79
	Follow-up (n=94/96)	16 (17.0)	25 (26.6)	7 (7.4)	38 (40.4)	8 (8.5)	2.97
16. I may have some information about child maltreatment, but I do not record it for anything	Baseline (n=165/167)	100 (60.6)	42 (25.5)	10 (6.1)	10 (6.1)	3 (1.8)	1.63
	Follow-up (n=94/96)	52 (55.3)	32 (34.0)	1 (1.1)	5 (5.3)	4 (4.3)	1.69
17. I feel that raising the matter is a security risk	Baseline (164/167)	54 (32.9)	43 (26.2)	12 (7.3)	49 (29.9)	6 (3.7)	2.45
	Follow-up (n=93/96)	39 (41.9)	24 (25.8)	11 (11.8)	18 (19.4)	1 (1.1)	2.12
18. I'm frustrated when I can't do anything about child maltreatment and let it be	Baseline (n=164/167)	99 (60.4)	37 (22.6)	14 (8.5)	9 (5.5)	5 (3.0)	1.68
	Follow-up (n=94/96)	55 (58.5)	22 (23.4)	7 (7.4)	4 (4.3)	6 (6.4)	1.77
19. I always talk about child maltreatment when I suspect it's possible	Baseline (n=166/167)	9 (5.4)	33 (19.9)	16 (9.6)	57 (34.3)	51 (30.7)	3.65
	Follow-up (n=94/96)	3 (3.2)	13 (13.8)	6 (6.4)	30 (31.9)	42 (44.7)	4.01

Table 6: Association between two cooperation statements and opinions of the baseline and follow-up groups

Statement		Baseline (N = 167)	Follow-up (N = 96)	Chi square test		
		No. (%)	No. (%)	χ^2 -value	Degree of freedom (df)	p-value
Different professions have different views on the confidentiality of customer affairs						
	Disagree	86 (53.4)	64 (69.6)			
	Do not agree or disagree	23 (14.3)	6 (6.5)			
	Agree	52 (32.3)	22 (23.9)			
	Total	161 (100.0)	92 (100.0)	7.06	2	.029
It is difficult to discuss child maltreatment if there are no cooperation partners to guide families in need						
	Disagree	110 (66.3)	72 (76.6)			
	Do not agree or disagree	12 (7.2)	10 (10.6)			
	Agree	44 (26.5)	12 (12.8)			
	Total	166 (100.0)	94 (100.0)	.700	2	.030

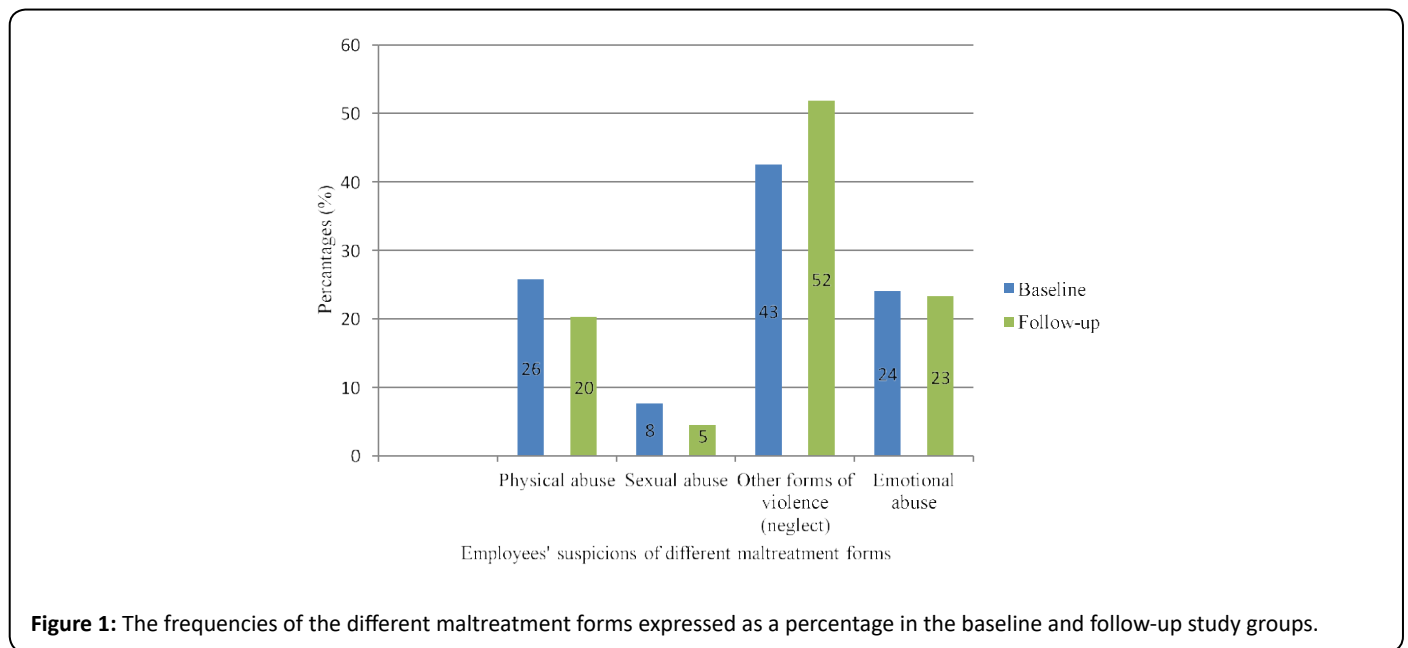


Figure 1: The frequencies of the different maltreatment forms expressed as a percentage in the baseline and follow-up study groups.

or questioning and listening as a tool were mentioned on almost every reply form. A participant explained: *“I am talking to my colleagues about how to approach this topic with the family. I call a social worker and ask for advice/meeting if I find it difficult to handle it”*. In the follow-up study, two-fifths (40.3%; 23 of 57) of social and health care participants reported that they have used the BCAP instrument.

Overall, 34.2 percent of the baseline participants (n = 55 of 161) reported having filed a child welfare notice (“always”, “almost always”, “often”, “sometimes” or “rarely”). Of those who had reported (n = 29 of 93) were health care professionals and (n = 26 of 68) were early childhood education professionals. There was no difference between the above-mentioned groups regarding notices (.351). Correspondingly, of the follow-up study participants, 44 percent of the social and health care professionals (n = 24 of 55), and 26 percent of early childhood education professionals (n = 10 of 38) reported having made a notice (.088).

Further, the respondents were asked in what kinds of situations the notification was made. One participant expressed the following thoughts: *“My concern for the child is big, but the parents overlook the concern and they do not want to cooperate for the child’s best. In addition, after discussing it with the social worker, I have received confirmation that the notification is definitely worth making”*. The child welfare notice was omitted in the following situations, for example: *“Someone else has already done it”* or *“The report has been made by a doctor”* or *“Doing it is not part of my job; a social worker in our unit makes the child welfare notices”*.

Moreover, in the baseline study, only 8.2 percent (n = 13 of 159) reported that they have made an investigation request to the police. They all (n = 13 of 91) worked in social and health care. Nobody who worked in early childhood education reported that she had not ever made a report (n = 0 of 68). The difference is statistically significant (.001). In the follow-up study, all in all, 4.4 percent (n = 4 of 91) reported that

the request to the police had been made. Further, the employees were asked in what kinds of situations the investigation request was made or not. The following expressions emerged: *“If an assault or sexual assault has come to light”* and *“The doctor and the social worker have made a request”* or *“In the absence of the evidence”*.

Approximately, three-quarters of the baseline participants (72%; 117 of 162) and three-quarters (75%; 67 of 89) of the follow-up participants agreed that “According to the current legislation, it is possible to report child’s affairs to other cooperation partners if her/his interests so require”.

Multiprofessional collaboration

Finally, the professionals were asked to assess multidisciplinary cooperation. First, the employees in the follow-up study reported that there were more partners available than those in the baseline group (.030) (Table 6). Moreover, 55 percent of the baseline participants (n = 92 of 166) and 62 percent of the follow-up participants (n = 59 of 95) reported that their superiors and workmates have supported them when they have contacted to other cooperation partners (Table 5, statement 5). Otherwise, the vast majority (92%) of the follow-up employees (n = 88 of 96) reported receiving the most support just from their own workmates.

Second, statistical significance was found between the study participants’ opinions related to the statement “Different professions have different views on the confidentiality of customer affairs”. Among the follow-up study participants, there were more who disagreed compared to the baseline participants (.029) (Table 6).

Further, a slight positive change occurred in the respondents’ opinions related to the statement “Inadequate knowledge of other professionals may prevent me from interfering with the child’s and/or family’s affairs” (54.7% versus 63.0%), but the difference was not statistically significant (p = .430).

Discussion

Changes in professionals’ knowledge in identifying child maltreatment

Research findings show that in general, professionals recognise the presenting signs and symptoms, especially neglect, and risk factors of child maltreatment. In this respect, the findings are parallel with an earlier study [19]. Professionals’ observation of neglect even seemed to increase in the latter measurement. This may be a good sign that employees also notice other maltreatment than physical or sexual types, which have been more studied and emphasized.

However, two-thirds of the follow-up respondents disagreed that the identification of child maltreatment is easy. There are many risk factors and often many more signs and symptoms which can be mixed with the family situation as a whole, and the tangled web may be difficult to open. In the follow-up study, the trained employees reported encountering suspected risk families more often.

Earlier studies [14,16] found that many professionals feel that they have not had sufficient training to detect child maltreatment and report it. A clear majority of the employees (82%) still agreed that they have a lack of special expertise in the field of child maltreatment. In other words, they were aware of this fact. Nevertheless, over a third of employees in the follow-up study reported having no training needs. This kind of result may be an indication that the participants have been satisfied with the training they receive. After all, it has been noted that training containing the core elements is more important than the length of the training [36]. A lack of special expertise, in turn, may refer to a lack of more comprehensive knowledge since a theory base has to be obtained before practicing.

Further, more than a quarter of employees still could not say whether they use tools for the identification of and intervention in child maltreatment. In particular, those who were trained and worked in social and health care reported using the tools more. However, according to the employees, their awareness of the guidelines and/or instructions on how to handle child maltreatment has slightly increased. In this development project initiative, an identification tool (BCAP) was used only by nurses. Other professionals were aware of the initiative, but not all actively participated in it. After all, identifying risks and maltreatment concerns the whole organization and needs to be aligned.

Identification may have been difficult, even with tools, because the phenomenon is very sensitive. Assessing child security in a family means assessing family life that has culturally been considered a highly private area. The BCAP can be used preventively by identifying family worries before family life becomes negative and endangers the child’s security. We are aiming to transfer into a caring culture where family worries are allowed to be revealed and taken into a consideration in all child and health services and solved in a family centered way as early as possible.

Changes in professionals’ knowledge when discussing child maltreatment

First, in both study phases, the participants were unanimous about the fact that talking about the child maltreatment falls within their professional and legal duty. In this respect, our finding is parallel to the previous one [15]. However, based on the study results, the vast majority of the follow-up employees (88%) still considered it difficult. Perhaps they feel uncomfortable discussing maltreatment history [17]. Almost all the participants reported proceeding in peace before asking about child maltreatment. About two-fifths of the participants thought that raising the issue of child maltreatment would raise further problems and they would not have enough time to deal with them. On the other hand, over three-quarters of the participants reported that they always will raise the matter when they suspect maltreatment.

According to the research results, it seems that not all child maltreatment cases can be substantiated or they will not be revealed and reported to the authorities. Based on the Finnish legislation, suspicion of child maltreatment is already an evident reason for notification. Further, if the suspicion concerns sexual or physical abuse, all professionals have a duty to report their suspicion directly to the police (the amendment to the Act on the Protection of the Child Welfare 1302/2014). Moreover, open answers gave the impression that the report should be filed by someone other than the person with firsthand knowledge. In this respect, our results are parallel with earlier results [12,21,17,10]. In Finland, reporting has traditionally been part of a social worker’s or doctor’s role. Only recently, it has been emphasized that the first person to discover maltreatment or suspicion of it will have the obligation to report it. Identifying maltreatment risks in families preventively is perceived to be the responsibility of the primary health and social care. We recommend considering preventive actions for all child and family services as family situations can change swiftly or worries can accumulate to the point of crisis unexpectedly.

Further, more than two-thirds of professionals still reported that they required further evidence before intervening in child maltreatment. As Falkiner et al. [21] have stated, the employees have a need for certainty before initiating a report. However, the hesitation and need to obtain more evidence are a bit scary because even one bruise can be a sign of long-term or repeated violence. Perhaps professionals’ attitudes about their duties to report to other authorities are poorly understood, as Mathews et al. [9] have argued. On the other hand, our result contradicts the fact that just over three-quarters of the participants

agreed that current legislation is not an obstacle to report a child's affairs to other authorities and/or helpers. One reason for this kind of result could be that professionals fear the negative consequences (e.g. the parents' indignation) or wrong diagnoses. This finding is congruent with Herendeen et al. [22] report. A family-centered focus, dialogic encounters, multiprofessional joint values and principles as well as finding mutual solutions to problems facilitates family welfare and the child's security. Therefore, it demands long-term personal and collective practice development. Nurses also require constant supervision of the work or debriefing to support practice and personal well-being [27].

Changes in knowledge related to multiprofessional collaboration

Multi-agency cooperation and information exchange are obligated by the Finnish legislation. Moreover, Finnish national web-based training aims to unite the child maltreatment identification and prevention professionals to work together co-productively both on the national level and in municipalities [37]. That means working together more jointly, where the family is in the center of support and care.

First, less than a quarter of the participants agreed that the professionals have different views on the confidentiality of customer affairs, while about one-third of the baseline respondents thought so. Further, awareness of the cooperators to guide children and parents to has also increased. Not more than one-eighth of the respondents agreed that they are not available, while over a quarter of the baseline respondents thought they were. In part, this result may have contributed to the fact that the training material consisted of local protocols regarding child maltreatment interventions, the local and national third-sector support services and two multi-professional development days. According to Young et al. [38], strong collaborative relationships are built over time through shared experiences. These relationships appeared to be built based on knowing and understanding the work of other agencies and disciplines, for example. We would like to argue that discussions in multi-professional teams contributed to knowing the content of another professional's work better. In this respect, it was likely that there was a change. Moreover, this confirms the conclusion that multidisciplinary training should continue to be organized.

Limitations of the study

Some limitations of the present study must be considered. First, both study samples were quite small. Second, the instrument used was based on the participants' report data. Only nine participants reported that they had also participated in the baseline study. On the other hand, the research groups were quite similar in character. A follow-up study in a busy health care context, where the turnover and change-over rates of workers and patients are high, limits proper study possibilities. Nurses are changed over to other wards due to ward acuity situations or to promote competency in different child health fields to facilitate quick turnovers. Thus, it is a little bit difficult to clarify the degree of congruence between the reported data and the actual situation of intervening, discussing and reporting child maltreatment.

Further, the measurement period was short. People perceive things in many different ways and learning happens simultaneously on many different levels, and these perceptions are adopted in many different ways (formal and/or informal training) and so the real results can only be seen much later. However, earlier international study results parallel the present study results.

Conclusions

Overall, a small positive change occurred between the study periods. With certain reservations, we will present the finding that further training on recognition, reporting and cooperation regarding

child maltreatment improves professionals' knowledge. It increases their comfort and ease in discussing and reporting this sensitive issue.

Our findings suggest that the presence of instructions and/or guidelines and tools to identify and deal with child maltreatment are necessary to influence professionals' practices. However, more information is needed, especially on professionals' self-efficacy and attitudes in discussing and reporting child maltreatment. These issues should also be emphasized in training programs. Employees also need the support of the entire organization to move things forward. Most importantly, the employees were aware of their own shortcomings in identifying and dealing with child maltreatment.

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