Why professionals wouldn’t act...

A study among maternity nurses about facilitating and impeding factors in dealing with the domestic violence and abuse protocol

Master thesis
Birte Kerutt
s0191892

June 2013

1st Supervisor: Dr. Marcel Pieterse
2nd Supervisor: Annemieke Konijnendijk

UNIVERSITY OF TWENTE.
Abstract

With a yearly prevalence of 0.4% and 3%, domestic violence with respect to child abuse constitutes a threat to the health of the Dutch society. For professionals working within families, interfering is often easier said than done when they suspect domestic violence or child abuse. The upcoming implementation of a domestic violence and abuse protocol (Dutch: Meldcode) as mandatory aims to support professionals, in this case maternity nurses, in the Netherlands in dealing with such cases. Being able to adjust the protocol to them, the present study investigates factors that either facilitate or impede maternity nurses in dealing with cases of suspected violence or abuse within a family. A sample of 91 maternity nurses working in the region Twente, The Netherlands, participated in an online survey, answering questions about their actual behavior in cases of violence and abuse, as well as their attitude towards the protocol and their intention to use it. Results show that especially social norm plays an important role. Being supported by colleagues, managers, executives and organizations greatly contributes to maternity nurses’ intention to use the protocol. Additionally, it can be concluded that more training and education is needed to prepare maternity nurses for working with the protocol. The findings of the present study partly enable authorities to adjust the protocol to the needs of maternity nurses.

Keywords: domestic violence, child abuse, domestic violence and abuse protocol, Meldcode, maternity nurses
List of abbreviations

AMK - Advice and Registration Point for child abuse
ASE - Attitude, Social Influence, Self-efficacy
MANOVA - Multivariate Analysis of Variance
MIDI - Measurement Instrument Determinants of Innovations
NPM - Netherlands’ prevalence study of maltreatment of youth
TNO - Dutch Organization for Applied Scientific Research
TRA - Theory of Reasoned Action
SHG - Domestic Violence and Support Centre
Introduction

“In de verzorging en opvoeding van het kind passen de ouders geen geestelijk of lichamelijk geweld of enig andere vernederende behandeling toe” (Art. 1:247 BW). This passage, stating that parents are not allowed to practice emotional or physical violence, nor any other kind of abuse while raising their children, was officially added in 2007 to the paragraph about family law in the civil code of the Netherlands. The second Netherlands’ prevalence study of maltreatment of youth (NPM-2010) reports an amount of 96,175 children, which corresponds to 3% of children in the Netherlands between the age 0-17 who became victims of child abuse and neglect (Alink, van IJzendoorn, Bakermans-Kranenburg, Pannebaker, Vogels & Euser, 2011). This yearly prevalence of 3% is comparable to those in other Western countries (Euser, Van IJzendoorn, Prinzie, & Bakermans-Kranenburg, 2010). In comparison to research from 2005, cases of sexual abuse decrease, whereas emotional abuse, emotional neglect and other maltreatment increase within the years (Alink et al., 2011). Research from the Ferwerda (2009) reveals that the distribution of abused children among boys and girls between 0-12 years is approximately equal. From the age of twelve, there is a greater amount of abused female victims (77%) compared to male ones. The term child abuse falls under the ambit of domestic violence, so these two terms will both be examined in this study.

Ferwerda (2009) estimates a yearly prevalence of domestic violence incidents in the Netherlands of about 0.4%, meaning 3.9 incidents on 1000 inhabitants. In 1997, Dijk, Flight, Oppenhuis and Duesmann did research about domestic violence in the Netherlands, aiming to gain general data concerning this topic. Until then, there was almost no research about domestic violence regarding the general population in the Netherlands. Their study indicates that 45% of the Dutch population has ever become victim of domestic violence. Often, several forms of domestic violence such as physical, emotional and sexual abuse occur together. Concerning the duration and the amount of experiences with domestic violence, Dijk et al. (1997) point out that 21% of the victims suffers from domestic violence for longer than five years. In 27% of the cases, the violence takes place in a weekly or even in a daily amount. In 2010, the yearly prevalence of victims of domestic violence is estimated at 1.2% (Van der Veen & Bogaerts, 2010). About 60% of the victims are female and about 40% are male. Research indicates that physical violence appears in 65% whereas sexual abuse takes place in 8% of all cases.
Domestic violence and child abuse

Speaking of domestic violence and child abuse, the question arises how these terms are defined. According to van Dijk et al. (1997), *domestic violence* is described as violence that is carried out by someone within the victims’ immediate family or family framework. This framework consists of (ex-) partners, family members, as well as friends of the family. Domestic violence does not refer to a particular location (for example at home) but it refers to the relationship between victim and offender. Van der Veen and Bogaerts (2010) state that it can be expressed in different ways, such as physically (e.g. threatening to exercise physical power and injuring with a weapon) sexually (e.g. forcing to carry out sexual activities) or emotionally (e.g. threatening, ridiculing, stalking).

The term *child abuse* also refers to physical, emotional and sexual abuse, as well as physical or emotional neglect (Euser, Van IJzendoorn, Prinzie, & Bakermans-Kranenburg, 2010). According to the NMP-2010 especially physical and emotional neglect occurs frequently. Being one special form of it, child abuse falls under the broader term of domestic violence.

Consequences of domestic violence and child abuse

There are numerous consequences of domestic violence. As reported by Van der Veen and Bogaerts (2010), they can be separated in relational, emotional, work and education related and physical consequences. In cases where the offender appears to be the husband one of the most frequent relational consequences is divorce. Especially victims of sexual abuse report problems with relations or intimacy. Commonly occurring emotional consequences are anxiety/fear and depression. Victims of violence and abuse often lose their self-confidence which repeatedly leads to other relational problems. Concerning work and education related consequences, victims more often lose their jobs and have to deal with financial problems. Furthermore, there are indications that victims of physical, sexual and other violence more often suffer from addiction problems (alcohol, drugs, medicine and eating disorders). Moreover, 25% of the victims claim to have already committed a suicide attempt (Van der Veen & Bogaerts, 2010). In agreement with these findings other studies state short term and long term consequences such as injuries, mental illness, complications of pregnancy (Ramsay et al., 2002).

Child neglect, sexual abuse, physical abuse and emotional abuse can have great influence on the well-being and the development of a child. According to the Netherlands Youth Institute, physical and sexual child abuse can lead from immediate physical effects (such as bruises,
fractures, burns), including harm of the inner organs, through to death. The effects can be immediate as well as temporary. As stated in a research by Perry (2002) and Shore (1997), child abuse can impair a child’s brain development which negatively influences its physical, mental and emotional development. Furthermore, Briggs (1995) states that victims of child abuse run a greater risk of later becoming offenders which creates a ‘generation cycle’ of abuse.

Furthermore, child abuse can have a great impact on a child’s psychological well-being. It can lead to emotional and behavioral problems. As said by a study from the Trimbos-Instituut (Dutch centre of expertise on mental health and addiction), a large part of street children grew up in families where domestic violence and child maltreatment are on the order of the day (Planije, Van’t Land & Wolf, 2003). Furthermore, abuse and neglect can lead to psychological problems such as self-mutilation, post-traumatic stress disorder (PTSD), dissociative disorders, addiction, attention-deficit hyperactivity disorder (ADHD), reactive attachment disorder and many more (Teicher, 2000; Wolzak & ten Berge, 2008). Becoming a witness of domestic violence among adults also belongs to the terms of emotional abuse and child neglect (Alink et al., 2011).

Besides consequences regarding the child and its family environment, child abuse also causes direct costs (e.g. for investigating allegations of child abuse) and indirect costs (e.g. long-term economic consequences such as costs for juvenile and adult criminal activity) for the society (National Clearinghouse on Child Abuse and Neglect Information, 2005).

**Meldcode**

To prevent those and other negative consequences, it is important to interfere as soon as possible when domestic violence or child abuse is suspected. Professionals who work with children play an important role in signaling domestic violence and/or child abuse. There are several occupational groups who have a certain responsibility (Doeven, 2008). One of those groups concerns employees in the field of health care (doctors, nurses, midwives, maternity nurses, physiotherapists etc.).

In the Netherlands, a *model reporting code for responding to signs of domestic violence or child abuse* (Dutch: Meldcode voor huiselijk geweld en kindermishandeling), further referred to as the “Meldcode”, has been developed. It contains a five-stage action plan for responding to signs of domestic violence and child abuse (Ministerie van Volksgezondheid, Welzijn en Sport, 2012). The five stages are:
1) Identifying the signs
2) Peer consultations and, if necessary, consultation with the AMK\(^1\) or the SHG\(^2\)
3) Interview with the client
4) Assessing violence and child abuse
5) Reaching a decision: organizing or reporting assistance

Until the 1\(^{st}\) of July, 2013, using the basic model of the Meldcode is recommended by the government, but it is not yet compulsory. The basic model aims to support organizations and professionals in drawing up guidelines for their own organization or practice. The steps serve as an aid in handling a structured course of action while dealing with signals of child abuse. In July 2013, the Government of the Netherlands will implement the use of the Meldcode as mandatory.

In 2008, Doeven did research about possession, appreciation, use and training concerning the ‘Meldcode kindermishandeling’ (child abuse) in the Netherlands. Until now, Doeven’s investigation is the only one concerning this topic. Based on this fact it is used in this study although the examined group of health care professionals is very wide, with low amounts of several occupational groups, and the findings are exclusively based on professionals’ self report. According to that research, 43% of examined health care organizations indicated to be in possession of the basic model of the Meldcode in 2007. As an example, almost half of participating maternity nurse organizations indicated to be in possession of a Meldcode (48%). The term maternity nurse in this case refers to the Dutch term ‘kraamverzorgende’. Kraamzorg describes a unique postnatal service in the Netherlands, received by women who just gave birth. The maternity nurse comes to the mother’s home and stays with her eight to ten days after the delivery, to give aid to her recovery and to provide her with assistance and advice.

Taking a closer look at professionals’ actions when suspecting child abuse, it turns out that some of the several stages of the Meldcode are carried out less often than others. Especially the second stage and the fifth stage are often not conducted when assuming child abuse. In 70% of all cases, professionals do not consult colleagues or the AMK or the SHG. Deciding to organize the distribution of help or reporting child abuse does not take place in 64% of the cases (Doeven, 2008). Considering the fact that a majority of professionals does not take action as required by the stages of the Meldcode, the question arises what prevents the professionals from taking action.

---

\(^{1}\) AMK = Advice and Registration Point for child abuse (Dutch: “Advies- en Meldpunt Kindermishandeling”

\(^{2}\) SHG = Domestic Violence and Support Centre (Dutch: “Adviespunt en Steunpunt Huiselijk geweld”)
This study concentrates on maternity nurses. Because of their attendance in the families, they have got the possibility to identify signals of child abuse and domestic violence on the scene. Despite their important role, up to now there is only little research about how maternity nurses respond when they suspect child abuse and domestic violence.

A couple of already established reasons why maternity nurses possibly hesitate to take action will be examined in the following paragraph.

**Innovation**

The implementation of the Meldcode as from July 2013 is expected to bring a change in the amount of reported cases of domestic violence and child abuse. Despite an increasing amount of research on innovation implementations, little is known about the factors which support a successful implementation of an innovation to health care organizations (Bartholomew, Parcel, Kok & Gottlieb, 2001). In 2004, Fleuren, Wiefferink and Paulussen developed a framework containing the main stages and related factors in innovation processes (Figure 1).

Figure 1 shows four main stages in innovation processes: dissemination, adoption, implementation, and continuation. These stages form the whole expected process of an innovation. The transition between the four steps can be affected by certain determinants (Paulussen, 1994; Fleuren, Wiefferink & Paulussen, 2002). These determinants are described as the characteristics of the (1) socio-political context (e.g. rules and legislation), the (2) organization (e.g. its hierarchical structure and the organizational size), the (3) adopting person (e.g. user’s knowledge, skills and social support), and the (4) innovation (e.g. its compatibility and relevance). In this case, the AMK and SHG can be seen as the socio-political context because...
they form greater agencies which support organizations and professionals in working conform to the guidelines. The adopting persons are maternity nurses. The innovation in this study is the Meldcode and the organizations are different maternity nurses’ organizations employing maternity nurses. The implementation of the Meldcode represents the adoption phase of the model. In this study, this phase is investigated from the perspective of the adopting person, the maternity nurses.

As mentioned before, there are several barriers as well as supportive factors to take action, which professionals experience when suspecting domestic violence or child abuse. Taking a closer look at the four abovementioned determinants in terms of certain characteristics, possible barriers and supportive factors can be examined.

1) Socio-political context

In his article about professionals’ use of the Meldcode, Doeven (2008) points out that a small amount of respondents consider the AMK as not supportive enough in the whole process. Inadequate feedback from those greater agencies is also mentioned as a barrier. Furthermore, some professionals experience the time before the family actually gets help as too long, which is perceived as a failure of the AMK (Doeven, 2008). These and other problems with contact points and institutions complicate the cooperation with professionals, e.g. maternity nurses. In contrast, perceived assistance from the AMK or the SHG can be seen as a supportive factor.

2) Organization

Research indicates that inadequate feedback within organizations about results of reporting abuse forms a reason for professionals to not report again (Warner-Rogers, Hansen & Spieth, 1996). Without feedback, professionals do not know whether reporting has an effect on the situation of the family, which in turn lowers their motivation to report repeatedly in the future (Vulliamy & Sullivan, 2000). In connection with that, another possible barrier for professionals is their low confidence in their own organizations (Hansen et. al, 1997). If they do not expect to get adequate help from their managers, their motivation to report suspicions of abuse to them is low.

Doeven (2008) reports that professionals who are in possess of the Meldcode take three times as much action as their colleagues who do not own a Meldcode. The responsibility of possessing a Meldcode lies within the organization. In conclusion, owing a Meldcode can be seen as a facilitating factor. It supports professionals in acting with suspicions of violence and abuse.

Furthermore, there are findings about the positive relation between organization size and innovation adoption. According to Frambach and Schillewaert (1999), larger organizations are
often more inclined to adopt new innovations, in order to improve their productivity. It can be assumed that organization size plays an important role in adopting a new innovation (Kennedy, 1983).

(3) Adopting person

A possible reason which could prevent maternity nurses from taking action is the fear of negative consequences for themselves as well as for the families. Being falsely accused of domestic violence or child abuse can have great negative consequences for a family (Alvarez, Donohue, Kenny, Cavanagh & Romero, 2004). In this connection, the fear of prosecution also plays a role in professionals' consideration about taking action when suspecting violence or abuse (Hansen et. al, 1997). Similar findings are shown by research from Wilson and Gettinger (1989), who state that professionals often fail to report suspicions of violence or abuse because of the perceived disadvantages for the family. Also professionals are concerned about their relationship with the family (Hansen et. al., 1997). Especially in the case of maternity nurses who work within the families' homes, this argument plays an important role.

Another reason why professionals do not report violence is a phenomenon called ‘victim blaming’ which occurs when the victim of a crime, in this case domestic violence, is held entirely or partially responsible for what happened to him or her (Ryan, 1971).

According to research from Evanson (2006), another barrier to use an innovation is the non-usage of it by colleagues within the organization. This influences the behavior of the adopting person.

The earlier mentioned presence or absence of a Meldcode within an organization as well as professional’s knowledge about it influences the professional’s behavior. Furthermore owners perceive themselves as better equipped in dealing with cases of suspected child abuse than those who do not own a Meldcode (Doeven, 2008).

(4) Innovation

Factors regarding the innovation, in this case the Meldcode, can be found in research from Evanson (2006). She states that the success of an innovation depends inter alia on the belief that the guideline would improve practice as well as the importance of using it. Additionally, factors such as difficulty in using it and clarity of the guideline play an important role.
ASE-model

To operationalize all four factors of the above mentioned innovation model from Fleuren et al. (2004), as these were perceived from the user’s perspective, a certain model can be used. On the basis of this model, this study aims to answer the question which factors impede or facilitate maternity nurses in using the Meldcode.

The Attitudes, Social influence and self-Efficacy model (ASE-model) by de Vries, Dijkstra and Kuhlman (1988) aims to predict certain behavior. Based on the Theory of Reasoned Action (TRA) by Fishbein and Ajzen (1975; 1980) and Bandura’s Social Cognitive Theory, it consists of three main components: attitude (A), social influence (S) and self-efficacy (E) which are postulated to directly influence a person’s behavioral intentions which in turn influence actual behavior. Ajzen stated in 1991 that the higher the intention to carry out a certain behavior, the higher the chance that this behavior actually takes place.

The attitude describes an individual’s personal opinion which derives from perceived advantages and disadvantages of behavior. The advantages have to be experienced as greater than the disadvantages. There is only a slight chance of behavior change in people with a negative perception towards the outcomes of a certain behavior.

Social influence or social norm can be divided into three types: subjective norm, social support, and modeling. The first one can be described as an individual’s perception of a particular behavior, influenced by the judgment of significant others (e.g. colleagues, managers). Social support concerns the direct influence from others. Modeling comes from the abovementioned Social Cognitive Theory of Bandura and concerns learning by observing the behavior of others.

The last factor, self-efficacy, is based on the concept of perceived behavioral control by Ajzen’s Theory of Planned Behavior (1991). It concerns a person’s perceived ease or difficulty of performing a certain behavior.

The model (figure 2) assumes that these three cognitive variables determine intention and subsequent behavior.

![ASE-model by de Vries, Dijkstra and Kuhlman, 1988](image-url)
Figure 2 shows that the ASE-model presumes that behavior is determined by a person’s intention to behave. This intention in turn is influenced by the three factors: attitude towards a specific behavior (e.g. accomplishing certain stages of the Meldcode), social influence (e.g. perceived support from colleagues), and self-efficacy (e.g. the belief of being able to accomplish certain steps). Factors which mediate the relation between a person’s intention and its actual behavior are knowledge and skills of the person, as well as barriers and support the person experiences. By means of this model, the intention of maternity nurses’ behavior regarding the use of the Meldcode can be investigated and scientifically explained.

This study concentrates on investigating those barriers. Furthermore, factors will be examined which facilitate maternity nurses to take action. The main question in this study is: 

*Which factors facilitate or impede maternity nurses in using the Meldcode to take action while suspecting domestic violence or child abuse?*

**Methods**

By means of a cross-sectional study, the data were collected by means of an online survey containing 37 questions. The participants were contacted by e-mail via their managers of the separate organizations. By means of a link, they were able to fill in the questions on the internet.

**Respondents**

A total amount of 124 maternity nurses from seven organizations in the region Twente, Netherlands participated in this study. Thirty-three participants were excluded due to missing data. The organizations taking part are listed in the following paragraph.

- *RST Zorgverleners*, located at Barneveld, employing 11 maternity nurses.
- *Lancelot Kraamzorg*, located at Zwolle, employing 15 maternity nurses.
- *Zorggroep Sint Maarten*, located at Oldenzaal, employing 29 maternity nurses.
- *Zorgbureau Excellent*, located at Almelo, employing 11 maternity nurses.
- *Attent Kraamzorg*, located at Nijverdal, employing 12 maternity nurses.
- *Naviva Kraamzorg*, headquarter located at Deventer, employing 248 maternity nurses.
- *VVT Zorgverleners*, headquarter located at Almelo, employing 60 maternity nurses.
In table 1, ‘Percent total’ displays how the participating amount of maternity nurses (MN) per organization stands in proportion to the total amount of respondents in this study.

Table 1

<table>
<thead>
<tr>
<th>Organization</th>
<th>Total amount MN</th>
<th>Participating amount MN</th>
<th>Participating % p. Organization</th>
<th>Percent Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>RST</td>
<td>11</td>
<td>2</td>
<td>18.2%</td>
<td>2.2%</td>
</tr>
<tr>
<td>Lancelot</td>
<td>15</td>
<td>8</td>
<td>53.3%</td>
<td>8.8%</td>
</tr>
<tr>
<td>Sint Maarten</td>
<td>29</td>
<td>6</td>
<td>20.7%</td>
<td>6.6%</td>
</tr>
<tr>
<td>Excellent</td>
<td>11</td>
<td>6</td>
<td>54.5%</td>
<td>6.6%</td>
</tr>
<tr>
<td>Attent</td>
<td>12</td>
<td>1</td>
<td>8.3%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Naviva</td>
<td>248</td>
<td>56</td>
<td>22.6%</td>
<td>61.5%</td>
</tr>
<tr>
<td>VVT</td>
<td>60</td>
<td>11</td>
<td>18.3%</td>
<td>12.1%</td>
</tr>
<tr>
<td>None</td>
<td>1</td>
<td></td>
<td></td>
<td>1.1%</td>
</tr>
<tr>
<td>Total</td>
<td>91</td>
<td></td>
<td>100.0%</td>
<td></td>
</tr>
</tbody>
</table>

Besides information about their organization, other background information such as gender, work experience, suspicions within the last 12 months as well as the amount of families they worked with within the last 12 months were collected. Furthermore, it was explored whether participants have other tasks within their organization.

**Instrument**

After conducting the above mentioned background information, 29 questions followed. These were based on the already existing revised version of the *Measurement Instrument Determinants of Innovations* (further referred to as the MIDI) which was published in 2012 by Fleuren et. al on authority of the *Dutch Organization for Applied Scientific Research* (further referred to as the TNO). Furthermore, some questions were derived from a concept version of a questionnaire concerning a youth healthcare ‘Guideline Secondary Prevention Child abuse’ (JGZ-richtlijn ‘Secundaire preventive kindermishandeling), constructed at the Twente University, Netherlands (items number 10, 11). The questionnaire can be found in the appendix.
Procedure

On the basis of the earlier mentioned ASE-model, the items were allocated to the factors attitude, self-efficacy and social norm. It was aimed to find out whether these factors play a role in predicting the intention to carry out a certain behavior, which in this case was ‘using the Meldcode’. Furthermore, the items were expected to either facilitate or prevent maternity nurses from using the Meldcode. The whole analysis was concentrated on the three factors of the ASE-model, especially in relation to the intention and behavior of maternity nurses in using the Meldcode. The items were distributed as follows.

Attitude

The factor attitude was composed of the items number 12, 13, 14, 15, 16, 17, 18, 19, 22, 23, 28, 29, 30, 31 and 32. These items concerned perceived knowledge, personal advantages and disadvantages, perceived responsibility, and maternity nurses’ views of characteristics of the Meldcode, such as its clarity, complexity et cetera. This factor contained questions such as “I’m afraid that the situation of the family gets worse when I follow the Meldcode” (item 23) or “The Meldcode is too complex for me” (item 30).

Social influence

Social influence concerned items about the perceived influence of others towards the maternity nurses. It contained the items number 20, 21, 24, 25 and 26, concerning inter alia satisfaction and cooperation of the families, and fear of the possible impact on the family through taking action. Furthermore, these items were related to the descriptive norm, including the perceived use of the Meldcode by colleagues and the perceived meaning of clients, colleagues and others.

Self-efficacy

The last factor comprised the items number 9 “I’ve got enough knowledge to use the Meldcode” and number 27 which was related to the respondents' self-efficacy about being able to carry out the individual steps of the Meldcode. It has to be taken in consideration that maternity nurses can work conform to the Meldcode, even when they do not know the content.

Distal factors

Besides demographic information and the division into the ASE factors, the questionnaire contained some distal factors. The participant’s knowledge about the Meldcode in general (item 7) and about its several steps (item 8) was enquired. This ‘knowledge about the Meldcode’ differs from the above mentioned perceived knowledge to use the Meldcode. Furthermore, they were
asked whether they have ever had a suspicion of domestic violence or child abuse (item 10). Other items concerned the organizations (items 33, 34, 35), for example “To what extent do you think there are sufficient possibilities (trainings, education etc.) to learn how to work with the Meldcode?” (item 34). At the end, the possibility was given to express suggestions, tips and ideas about supporting factors concerning the use of the Meldcode (item 37).

**Dependent variables**

The most important dependent variable in this study was the intention of maternity nurses to use the Meldcode (item 36). According research, intention directly influences behavior (de Vries, Dijkstra, Kuhlman, 1988). Participants were asked to rate their intention to use the Meldcode on a 10-point Likert Scale. Another dependent variable was the behavior of maternity nurses regarding the steps of the Meldcode which they carry out within families while having a suspicion of domestic violence/child abuse (item 11).

Besides this division, the items were classified into the four belonging categories of the framework of Fleuren et al. (2004), partially in overlap with the ASE-model. Research shows that these determinants were relevant for a successful implementation of an innovation (Fleuren et al., 2004). On the basis of this classification it was aimed to estimate whether there was a correlation between these factors and the intention of maternity nurses to use the Meldcode as well as their behavior. The socio-political context contained the item number 35, concerning difficulties in cooperation with professionals outside the own organization. The characteristics of the organization included the items number 33 and 34, concerning feedback and trainings/education given by the organizations. Items regarding the adopting person were number 7, 8, 9, 12, 13, 14, 15, 16, 18, 19, 20, 21, 23, 24, 25, 26 and 27 of the questionnaire. They concerned inter alia the user’s knowledge about the Meldcode, perceived personal advantages and disadvantages, perceived social support et cetera. The factor innovation was compiled by the items number 28, 29, 30, 31 and 32, including topics such as perceived clarity, complexity and completeness of the Meldcode.

Except for the demographic questions and three others (items 24, 36 and 37) participants were asked to answer all questions on a 5-point Likert Scale, ranging from “I don’t know this activity at all – I know this activity exactly”, “Strongly disagree – Strongly agree”, “None of my colleagues – All of my colleagues”, “Absolutely not – Absolutely” and “Clearly not enough – Clearly enough".
The earlier mentioned five basic steps of the Meldcode were subdivided into nine steps, based on the action plan for maternity nurses (V&VN, 2011). Several steps were subdivided, for example consulting the AMK apart from consulting the SGH. Furthermore, a step about “actively asking for feedback, concerning results of reporting” has been added.

**Reliability analysis**

Before carrying out the analyses, the compiled factors were tested on their reliability. Their Cronbach’s alpha value was calculated which implicates the internal consistency of the several underlying items within a factor. The reliability of the characteristics of the attitude could be raised by deleting the item ‘complexity’. After that, a good internal consistency between the items of the factor attitude was found ($\alpha = 0.85$). The factor self-efficacy also revealed a good internal consistency ($\alpha = 0.86$), whereas the factor social norm indicated an acceptable value ($\alpha = 0.75$). Concerning the items, forming the factors of the innovation model from Fleuren, four Cronbach’s alpha values were calculated. The characteristics of the user showed an excellent internal consistency of $\alpha = 0.92$. After deleting the item ‘complexity’ (item 30) innovation showed an excellent Chronbach’s alpha value ($\alpha = 0.9$). The two items forming the characteristics of the organization revealed an acceptable internal consistency ($\alpha = 0.72$). Calculating the internal consistency of the factor socio-political context resulted in a good Cronbach’s alpha value ($\alpha = 0.84$).

**Data analysis**

Based on the ASE-model and the determinants of Fleuren et. al (2012), different analyses were carried out to investigate impeding as well as facilitating factors to take action while suspecting domestic violence or child abuse. Due to missing data, 33 participants were excluded from the whole study. Maternity nurses who just skipped a single question were still included and those answers, called missing values, were treated with the option ‘exclude cases pair wise’ which excludes the respondents only if they are missing the data required for a specific analysis. In all other analyses for which they possessed the necessary information, they were still included.

At first, a bivariate analysis with the three factors of the ASE-model and the four determinants of Fleuren et. al (2004) was carried out to investigate whether there were significant correlations between these factors and intention respectively behavior.

After that, several independent sample t-tests were conducted on item-level to investigate
whether there were significant differences between low and high intenders on concrete beliefs underlying the constructs of the ASE-factors. Furthermore, an independent sample t-test with the items of self-efficacy and the two groups of organization as grouping variable was carried out. By means of these analyses, it was further aimed to assess probably supportive as well as preventive factors to use the Meldcode.

Furthermore, two hierarchical linear regression analyses with intention respectively behavior as dependent variables and the factors of the ASE-model as independent variables were conducted. By means of this analysis, it was aimed to not only look at the relationship between the ASE factors and intention respectively behavior, but to also control if work experience, knowledge of the Meldcode, and suspicion confound this relationship. Therefore these three variables were tested as covariates on the factors from the ASE-model. The analysis with behavior as independent variable also contained intention as independent variable besides the ASE-model.

A multivariate analysis of variance (MANOVA) has been conducted to examine whether there is a difference between maternity nurses from smaller organizations and those from larger organizations on the factors of the ASE-model. Therefore, organization was divided into two groups. The first one contained smaller organizations which employ less than 50 maternity nurses (RST, Lancelot, Sint Maarten, Excellent and Attent) and the second one comprised larger organizations, employing more than 50 maternity nurses (Naviva and VVT). Based on earlier mentioned research, a significant difference between these groups regarding the attitude, social norm and self-efficacy was expected (Kennedy, 1983). This analysis was chosen based on several advantages of a MANOVA over three separate analyses of variance (ANOVA’s). In contrast to the former, the latter increases the risk of type I statistical errors which means that it accidentally rejects a null hypothesis when it is true.

Finally, it was investigated if there were some moderating or mediating effects between the three ASE factors and the background variables work experience, knowledge about the Meldcode and suspicion towards intention.
Results

Description of the sample

The data of 91 maternity nurses were used in this research. The demographic information revealed that all participants were female. The work experience of the participants ranged from one to 40 years ($M = 14.3; SD = 10.52$). Within the last 12 months, the amount of suspected cases of domestic violence and child abuse ranged from zero to six cases ($M = 0.43; SD = 0.98$). One participant who claimed to have had 252 suspicions of domestic violence or child abuse within the last 12 months was ignored in this calculation. The average amount of families they worked with within the last 12 months ranged from zero to 50 ($M = 19.68, SD = 9.2$). The data showed that only two out of the 91 respondents carried out another of the stated functions within the organization except for being a maternity nurse. Regarding the knowledge about the Meldcode, the data revealed that an amount of 19.8% of the participants did not know the Meldcode at all. About 80% already knew it from which a number of 13.2% claimed to have read it completely and thoroughly ($M = 2.49, SD = .96$). By asking whether the respondents ever had a suspicion of domestic violence or child abuse, 67% of the respondents gave a positive answer, in comparison to 33% who claimed to never having had a suspicion. Table 2 displays some background information.

Table 2

<table>
<thead>
<tr>
<th>Information about background variables</th>
<th>N</th>
<th>Min.</th>
<th>Max.</th>
<th>M (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Experience (years)</td>
<td>91</td>
<td>1</td>
<td>40</td>
<td>14.3 (10.52)</td>
</tr>
<tr>
<td>Suspicions in the last 12mth</td>
<td>91</td>
<td>0</td>
<td>6</td>
<td>0.43 (.98)</td>
</tr>
<tr>
<td>Families in the last 12mth</td>
<td>88</td>
<td>0</td>
<td>50</td>
<td>19.68 (9.22)</td>
</tr>
<tr>
<td>Knowledge about the MC</td>
<td>91</td>
<td>1</td>
<td>4</td>
<td>2.49 (.96)</td>
</tr>
</tbody>
</table>

Correlation analysis

At first, a bivariate analysis with the three factors of the ASE-model, the four factors of the intervention model and intention respectively behavior was conducted. A Cronbach’s alpha level of .05 for all statistical tests was used. It was found that all factors significantly predicted intention ($p < .05$). Analyses with behavior as independent factor established significant correlations with social norm (from the ASE-model), adopting person, innovation, organization and socio-political context ($p < .05$). Furthermore, intention significantly predicted actual
behavior ($p < .006$). Table 3 displays the Pearson’s correlation ($r$) between the variables and the value of significance.

Table 3

<table>
<thead>
<tr>
<th></th>
<th>Intention</th>
<th></th>
<th>Behavior</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$r$</td>
<td>Sig.</td>
<td>$r$</td>
<td>Sig.</td>
</tr>
<tr>
<td>Attitude</td>
<td>.42**</td>
<td>.000</td>
<td>.19</td>
<td>.072</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>.46**</td>
<td>.000</td>
<td>.10</td>
<td>.233</td>
</tr>
<tr>
<td>Social norm</td>
<td>.55**</td>
<td>.000</td>
<td>.35**</td>
<td>.003</td>
</tr>
<tr>
<td>Adopting person</td>
<td>.54**</td>
<td>.000</td>
<td>.34**</td>
<td>.004</td>
</tr>
<tr>
<td>Innovation</td>
<td>.60**</td>
<td>.000</td>
<td>.21</td>
<td>.050</td>
</tr>
<tr>
<td>Organization</td>
<td>.45**</td>
<td>.000</td>
<td>.33**</td>
<td>.005</td>
</tr>
<tr>
<td>Socio-political context</td>
<td>-.22*</td>
<td>.018</td>
<td>-.24*</td>
<td>.034</td>
</tr>
<tr>
<td>Intention</td>
<td></td>
<td></td>
<td>.32**</td>
<td>.006</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (1-tailed).
*. Correlation is significant at the 0.05 level (1-tailed).

Note: Intention $N = 89$, Behavior $N = 61$

**Independent sample t-tests**

To investigate whether there were differences between the two groups [lower ($\leq 7$) / higher ($\geq 8$) intention], three item-based independent sample t-tests were conducted with either the several items of attitude (table 4), social norm (table 5) or self-efficacy (table 6) as test variables and group-intention as grouping variable.

The analysis of the items of attitude revealed that five of the 14 tested items did not show a significant difference between the two groups. The items relation with the client, time, and maternity nurse’s attitude towards domestic violence did not seem to be significantly higher by maternity nurses with a higher intention to use the Meldcode ($p > .05$) People with higher scores on intention showed significantly higher scores on the other nine items than people with a lower intention ($p < .05$).

Regarding the factor social norm, the item satisfaction of the family did not reveal significantly higher scores among the maternity nurses with a higher intention ($M = 2.83$, $SD =$
.86 compared to $M = 2.54$, $SD = .85$). In contrast, the other four items displayed a significant difference between maternity nurses who scored either lower or higher on intention ($p < .002$).

The two items of the self-efficacy both were analyzed as significantly different between the two groups of intention. People with lower scores on knowledge to use ($M = 2.66$, $SD = 1.11$) reported significantly lower scores on intention than those with higher scores ($M = 3.24$, $SD = .126$). Likewise, maternity nurses with lower scores on the factor self-efficacy indicated lower scores on intention ($M = 3.49$, $SD = .59$) than those who scored higher ($M = 4.06$, $SD = .51$).

Independent sample t-tests with the items of self-efficacy as testing variables and the grouping variable organization (smaller vs. larger) revealed that one item showed a significant difference between the two groups. The perceived knowledge to use the Meldcode revealed higher scores by maternity nurses from larger organizations. Table 7 displays the values of the two underlying items of the factor self-efficacy.

Table 4

<table>
<thead>
<tr>
<th>Item</th>
<th>Lower M (SD)</th>
<th>Higher M (SD)</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support</td>
<td>2.71 (.15)</td>
<td>3.98 (.88)</td>
<td>-5.87</td>
<td>.000</td>
</tr>
<tr>
<td>Self confidence</td>
<td>2.66 (.16)</td>
<td>4.02 (1.04)</td>
<td>-5.77</td>
<td>.000</td>
</tr>
<tr>
<td>Fear of reaction</td>
<td>3.11 (.39)</td>
<td>3.28 (1.17)</td>
<td>-.59</td>
<td>.276</td>
</tr>
<tr>
<td>Relation with client</td>
<td>2.97 (.36)</td>
<td>3.00 (1.26)</td>
<td>-1.0</td>
<td>.460</td>
</tr>
<tr>
<td>Time</td>
<td>2.24 (.29)</td>
<td>2.70 (1.16)</td>
<td>.45</td>
<td>.441</td>
</tr>
<tr>
<td>Attitude towards MC</td>
<td>3.27 (.20)</td>
<td>4.11 (.84)</td>
<td>-5.27</td>
<td>.000</td>
</tr>
<tr>
<td>Expected effect</td>
<td>3.17 (.29)</td>
<td>4.31 (.74)</td>
<td>-4.74</td>
<td>.000</td>
</tr>
<tr>
<td>Feeling responsible</td>
<td>3.51 (.57)</td>
<td>4.01 (.63)</td>
<td>-3.81</td>
<td>.000</td>
</tr>
<tr>
<td>Attitude towards DV</td>
<td>2.66 (.91)</td>
<td>2.54 (1.08)</td>
<td>.55</td>
<td>.293</td>
</tr>
<tr>
<td>Fear of impact on fam.</td>
<td>3.06 (.97)</td>
<td>2.69 (1.06)</td>
<td>1.67</td>
<td>.049</td>
</tr>
<tr>
<td>Clarity MC</td>
<td>2.91 (.78)</td>
<td>3.96 (.75)</td>
<td>-6.33</td>
<td>.000</td>
</tr>
<tr>
<td>Visible results</td>
<td>3.11 (.93)</td>
<td>3.93 (.89)</td>
<td>-4.13</td>
<td>.000</td>
</tr>
<tr>
<td>Matches with work-meth.</td>
<td>2.60 (.74)</td>
<td>3.69 (.91)</td>
<td>-5.92</td>
<td>.000</td>
</tr>
<tr>
<td>Completeness MC</td>
<td>2.57 (.95)</td>
<td>3.80 (.79)</td>
<td>-6.62</td>
<td>.000</td>
</tr>
</tbody>
</table>

NOTE: one-sided p-value ($<.05$)
Table 5

Independent sample t-test between the ASE-factor social norm and lower/higher intention on item level

<table>
<thead>
<tr>
<th></th>
<th>Lower M (SD)</th>
<th>Higher M (SD)</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC use – colleagues</td>
<td>2.63 (.88)</td>
<td>3.33 (1.23)</td>
<td>-3.15</td>
<td>.001</td>
</tr>
<tr>
<td>Satisfaction of the fam.</td>
<td>2.54 (.85)</td>
<td>2.83 (.86)</td>
<td>-1.56</td>
<td>.062</td>
</tr>
<tr>
<td>Cooperation of the fam.</td>
<td>2.43 (.74)</td>
<td>2.72 (.86)</td>
<td>-1.66</td>
<td>.049</td>
</tr>
<tr>
<td>Social support</td>
<td>2.11 (1.09)</td>
<td>3.13 (1.30)</td>
<td>-3.83</td>
<td>.000</td>
</tr>
<tr>
<td>Subjective norm</td>
<td>3.07 (1.45)</td>
<td>3.96 (.84)</td>
<td>-3.96</td>
<td>.000</td>
</tr>
</tbody>
</table>

NOTE: one-sided p-value (< .05)

Table 6

Independent sample t-test between the ASE-factor self-efficacy and lower/higher intention on item level

<table>
<thead>
<tr>
<th></th>
<th>Lower M (SD)</th>
<th>Higher M (SD)</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived knowledge</td>
<td>2.66 (1.11)</td>
<td>3.24 (1.26)</td>
<td>-2.24</td>
<td>.014</td>
</tr>
<tr>
<td>Construct self-efficacy</td>
<td>3.49 (.59)</td>
<td>4.06 (.51)</td>
<td>-4.71</td>
<td>.000</td>
</tr>
</tbody>
</table>

NOTE: one-sided p-value (< .05)

Table 7

Independent sample t-test between the ASE-factor self-efficacy and smaller/larger organization on item level

<table>
<thead>
<tr>
<th></th>
<th>Smaller M (SD)</th>
<th>Larger M (SD)</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived knowledge</td>
<td>2.52 (1.38)</td>
<td>3.22 (1.10)</td>
<td>-2.47</td>
<td>.008</td>
</tr>
<tr>
<td>Construct self-efficacy</td>
<td>3.76 (.65)</td>
<td>3.86 (.59)</td>
<td>-.662</td>
<td>.254</td>
</tr>
</tbody>
</table>

NOTE: one-sided p-value (< .05)

Hierarchical linear regression analysis

In this analysis the dependent variable intention was regressed on the factors of the ASE-model. In model 1, intention was regressed on the control variables work experience, suspicion and knowledge of the Meldcode. The factors of the ASE-model were added as independent variables in model 2. The hierarchical regression analysis revealed that the three control variables contributed significantly to the regression model and accounted for 9.6% of the variation in intention. Adding the three variables of the ASE-model to the regression model explained an
additional 30% of the variation in intention, and this change in $R^2$ was significant. The predictive power through adding the factors of the ASE-model thus went from 9.6% ($R^2 = .096$) to 39.6% ($R^2 = .396$). Table 8 displays the values of model 1 [control variables, $\beta$, Sig.(\(\beta\))] and model 2 (control variables plus factors of the ASE-model).

Table 8

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work experience</td>
<td>.13 (.226)</td>
<td>.07 (.452)</td>
</tr>
<tr>
<td>Knowledge MC</td>
<td>.30 (.005)</td>
<td>.10 (.290)</td>
</tr>
<tr>
<td>Suspicion yes/no</td>
<td>.03 (.805)</td>
<td>- .05 (.598)</td>
</tr>
<tr>
<td>Attitude</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-efficacy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social norm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$R$</td>
<td>.310</td>
<td>.629</td>
</tr>
<tr>
<td>$R^2$</td>
<td>.064</td>
<td>.352</td>
</tr>
<tr>
<td>$F$</td>
<td>3.02</td>
<td>8.96</td>
</tr>
<tr>
<td>Sig.</td>
<td>.034</td>
<td>.000</td>
</tr>
<tr>
<td>$\Delta R^2$</td>
<td>.096</td>
<td>.300</td>
</tr>
<tr>
<td>$\Delta F$</td>
<td>3.02</td>
<td>13.56</td>
</tr>
<tr>
<td>Sig.$\Delta F$</td>
<td>.034</td>
<td>.000</td>
</tr>
</tbody>
</table>

NOTE: dependent variable: intention
Model 1: $R^2 = .064$, $F(3,85) = 3.02, p > .034$
Model 2: $R^2 = .352$, $F(6,82) = 8.96, p < .000$

A second hierarchical linear regression analysis was conducted with behavior as dependent variable (table 9). In contrast to the first hierarchical regression analysis, Model 1 did not contain suspicion as control variable, because only maternity nurses who already had a suspicion were asked about their behavior in such a case (N = 61). The analysis revealed that model 1 contributed significantly to the regression model. The two items together explained 11.9% of the variance in behavior. An additional 7.4% of the variation in behavior was explained through adding the three factors of the ASE-model. The predictive power went from 11.9% ($R^2 = .119$) to 19.4% ($R^2 = .194$). The second model was also significant. Adding intention to the analysis, explained another 2.4% of the variance in the data and this model was also significant. The three models together explained 21.7% of the variance in behavior.
Hierarchical linear regression analysis for behavior

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work experience</td>
<td>.00 (.983)</td>
<td>- .02 (.869)</td>
<td>- .04 (.762)</td>
</tr>
<tr>
<td>Knowledge MC</td>
<td>.35 (.008)</td>
<td>.26 (.039)</td>
<td>.25 (.057)</td>
</tr>
<tr>
<td>Attitude</td>
<td>- .02 (.884)</td>
<td>- .05 (.746)</td>
<td></td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>- .09 (.529)</td>
<td>- .14 (.340)</td>
<td></td>
</tr>
<tr>
<td>Social norm</td>
<td>.32 (.046)</td>
<td>.25 (.132)</td>
<td></td>
</tr>
<tr>
<td>Intention</td>
<td></td>
<td></td>
<td>.20 (.211)</td>
</tr>
</tbody>
</table>

R = .346, R² = .119, F(2,58) = 3.87, p < .027

R = .440, R² = .194, F(5,54) = 2.59, p < .036

R = .466, R² = .217, F(6,53) = 2.45, p < .036

NOTE: Dependent variable: Behavior

Multivariate analysis of variance

After splitting the item ‘organization’ into smaller organizations (<50 employees) and larger organizations (>50 employees), a multivariate analysis of variance (MANOVA) was conducted to decide whether there was a significant difference between smaller and larger organizations regarding the ASE factors. No significant result was revealed (p > .05). A univariate test with the single factors indicated that the self-efficacy differed significantly between the two groups, in contrast to the factors attitude, and social norm (table 10). This effect should be ignored, considering the non-significance of the MANOVA.
Table 10

**Multivariate analysis of variance with smaller/larger organization**

<table>
<thead>
<tr>
<th></th>
<th>Smaller M (SD)</th>
<th>Larger M (SD)</th>
<th>F</th>
<th>Sig.</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude</td>
<td>3.21 (.72)</td>
<td>3.27 (.53)</td>
<td>.21</td>
<td>.645</td>
<td>.002</td>
</tr>
<tr>
<td>Social norm</td>
<td>2.98 (.74)</td>
<td>2.94 (.59)</td>
<td>.05</td>
<td>.820</td>
<td>.001</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>3.14 (.87)</td>
<td>3.54 (.76)</td>
<td>4.36</td>
<td>.040</td>
<td>.047</td>
</tr>
</tbody>
</table>

NOTE: Smaller N = 23, Larger N = 67
Wilk’s Lambda = .94, $F (3,86) = 1.99$, $p < .121$

**Mediation and moderation analyses**

A couple of mediation and moderation analyses were carried out between the background variables work experience, suspicion (yes/no), knowledge of the Meldcode and the three factors of the ASE-model, with regard to the intention to use the Meldcode. It was found that neither a background variable moderated the relationship between the ASE-factors and intention, nor did the latter moderate the relation between the background variables and intention. For testing the significance of a mediation effect, a Sobel test was conducted. Regarding the mediator analyses, only knowledge about the Meldcode showed a significant effect on intention. Therefore, it was tested with the ASE-factors as possible mediators. Only social norm appeared to be a full mediator between knowledge about the Meldcode and intention (figure 3). The other factors did not show any significant mediating effects on the relationship between an independent background variable and intention.

![Figure 3: Full mediation from social norm between knowledge about the Meldcode and intention](image)

**NOTE**: *Correlation is significant at the 0.05 level (1-tailed).

The answers from maternity nurses about tips, suggestions and ideas displayed especially their perceived need for education and training regarding the Meldcode. The respondents stated to have interest in more communication with managers, colleagues as well as families. Furthermore,
they suggested getting more support from managers and the AMK. Additionally, they wanted to receive more feedback about cases of suspected violence or abuse. Finally, the absence of the possibility to report such cases anonymously was mentioned.

Conclusion and discussion

In the following section, the present study is summarized and the results are interpreted. Findings regarding the aim of this research to investigate impeding and supportive factors in dealing with the Meldcode will be explained. Afterwards, practical implications as well as limitations and recommendations will be mentioned.

Searching for factors that either facilitate or impede maternity nurses in dealing with the Meldcode, a closer look will be taken on the factors of the ASE-model. The results of the correlation analyses show that all factors are highly related to maternity nurse’s intention to use the Meldcode. This supports the statement of de Vries et al. (1988) that all three factors influence people’s intention to behave. In accordance with findings from Fleuren et al. (2004), the factors of the innovation model, which in this study greatly overlap with the factors of the ASE-model, also predict the intention as well as behavior. In conclusion, all factors either play a facilitating or an impending role.

Examining the underlying items of the ASE factors in particular reveals answers to the main question of this study. Except for four items of attitude, all other items predict the intention of maternity nurses to use the Meldcode. In accordance with the literature, the fear of negative consequences for the family as well as for the maternity nurses themselves appears to prevent them from using the Meldcode (Alvarez et al., 2004 and Hansen et al., 1997). Contrary to expectations based on research from Hansen et al. (1997), a concern about the relationship with the family does not play a significant role. A possible reason could be the short period of time in which a maternity nurse stays within the family. Before higher institutions would intervene, in most cases the maternity nurses have already left the family. This may also explain the fact that maternity nurses do not consider the fear of the reaction of the family members as an obstacle in reporting violence or abuse. Furthermore, the attitude of the respondents towards domestic violence, influencing their relationship with the family, is not significant in this study. The small
amount of suspicions (~0.5 per capita within the last 12 month) which maternity nurses report in this study could be a possible reason for this. Because of their little experience with domestic violence, the maternity nurses may have not formed a strong opinion about it, yet. Items which concern maternity nurse’s perception of considering the Meldcode as supportive, significantly predict their intention. Furthermore, their perceptions of completeness and clarity of the Meldcode can be seen as impeding or facilitating factors. Likewise, the expected effect and visible results from using the Meldcode seem to support maternity nurses’ intention. A possible reason for the significance of these items in contrast to more complex items (e.g. relationship with the family) could be related to the earlier mentioned low amount of suspicion. Because of their lack of experience regarding suspicions, maternity nurses may not be able to remember their exact feelings and behaviors in such situations. Less complex items, such as clarity of the Meldcode, are easier to imagine and to understand than those items which require imagination. Therefore, it is possibly easier for them to answer on less complex items, which affects the results of this study.

One factor seems to be highly significant in all conducted analyses whether the dependent variable is intention or behavior. Social norm seems to play the most important role in this study in predicting intention/behavior concerning the use of the Meldcode. In accordance with that, Ajzen (2002) states that the more favorable the subjective norm, the stronger is a person’s intention to perform a certain behavior. Furthermore, two steps of the Meldcode (step 2 and 3) can be related to social norm which underlines its importance. On closer examination, social norm also seems to be most important regarding the suggestions which the maternity nurses report. They state to need more support from managers and other organizations, as well as more deliberations with colleagues. Furthermore, they suggest introducing a closing conversation with each family about the time the maternity nurse spent with them. Additionally, the fact that maternity nurses are employed in the social care sector where they directly work with clients, supports the fact that social norm seems to be most important to them.

Regarding the self-efficacy, it can be found that maternity nurse’s self-efficacy about their knowledge to use the Meldcode as well as their self-efficacy about being able to carry out the certain steps of the Meldcode, both contribute to the intention which maternity nurses have about using it. This is concurrent with findings from de Vries, Dijkstra and Kuhlman (1988) who state that self-efficacy expectations add significantly to the prediction of the intention to carry out a certain behavior. Another explanation of the relevance of self-efficacy is the fact that this study
concentrates on the adoption phase of the innovation process (Fleuren et al., 2004). Especially in this phase, maternity nurse’s self-efficacy is required to enable a successful use of the innovation.

The conducted hierarchical linear regression analysis indicates the great contribution of the three ASE factors to the variance in intention. The contribution of the factors to the variance in behavior is much smaller, but the analysis is also significant. This could be based on the fact that the Meldcode is not yet compulsory. Most maternity nurses did not work with it until now, so their past behavior is much less affiliated with the Meldcode than their perceived intention. Regarding the used background variables in these analyses, it can be found that the perceived knowledge about the Meldcode can be mediated by the factors of the ASE-model. A possible reason could be that the knowledge about the Meldcode influences maternity nurse’s intention only through their self-efficacy or the social norms they perceive. Only 13.2% of respondents report to know the Meldcode very well. It is possible that the intention of the other maternity nurses relies on their self-efficacy or the social norm, instead of their little knowledge about the Meldcode.

In the second analysis with behavior as dependent variable, the ASE-factors could not mediate the relationship between knowledge and behavior. To provide an explanation, the ASE model by de Vries, Dijkstra and Kuhlman (1988) can be taken into consideration (figure 2, introduction). It shows that the three factors (ASE) directly influence the intention, whereas knowledge moderates the relation between intention and behavior. Therefore, there is no mediating effect from the ASE factors. Likewise, no mediating effect of intention could be found. An explanation could also be the direct influence of intention on behavior which was described by de Vries et al. (1988) and Ajzen (1991).

In accordance with the findings of the hierarchical analysis, social norm completely mediates the relation between knowledge of the Meldcode and intention. In conformity with research of Ajzen (1991), knowledge in this case is a background factor that influences a person’s attitude, social norm and self-efficacy, which in turn influence the intention towards a certain behavior. An explanation for the fact that especially social norm seems to mediate the relation between knowledge and intention could be the general above mentioned importance of social norm in this study. Based on the lack of knowledge about the Meldcode and the fact that most maternity nurses have no experience with it so far, it is possible that their perceived support from others et cetera influences their intention more than their knowledge does. Other research also emphasizes the predicting effect of social norm on intention and actual behavior (Berkowitz, 1972). The other
two background factors, work experience and suspicion (yes/no), did not seem to play any role in mediation and moderation analyses. The insignificance of work experience can be justified by the fact that much experience and little experience both have advantages and disadvantages regarding the intention to use a new innovation. Prior work experience may include routines and habits which are not easy to give up (Dokko, Wild & Rothbard, 2009). The accumulation of work experience influences affective and cognitive reactions to the workplace and work actions (Forteza & Prieto, 1994). Maternity nurses with little work experience still have to develop these skills which may be a reason for them to do not want to work with clearly determined guidelines, but make up own experiences first. Based on this, work experience could not play an important role in predicting intention to use a new innovation. The insignificant difference between maternity nurses who already had a suspicion and those who did not can be attributed to the fact that the average amount of suspicions is relatively low. Most of them did not work with the Meldcode up to now, so their intention to use it should not be related to whether they already had a suspicion of violence/abuse or not. Hence, any great differences could not be expected.

Finally, in contrast to research from Kennedy (1983) and Frambach & Schillewaert (1999), the expected difference between smaller and larger organizations regarding the intention to use the Meldcode could not be found. A possible reason could be the fact that the Meldcode is not implemented yet. It is a new innovation for both small and large organizations, so their intention to use it is still equal. The fact that there are various inconsistent findings regarding organization size implicates that this variable has to be treated carefully (Frambach & Schillewaert, 1999). The only factor that appears to be higher among maternity nurses from larger organization is self-efficacy, although this effect is only slightly significant. A possible source of this result could be the unequal ratio between respondents from smaller organizations (N = 23) in contrast to those from larger organizations (N = 67). Based on the above mentioned reasons, this effect could not be of further interest.

**Practical implications**

Due to the lack of research regarding the use of the Meldcode among maternity nurses, the current study shed more light on their actual knowledge about it and their intention to use the Meldcode in the future. It has been found that especially social norm plays an important role for maternity nurses. Translating facilitating and impeding factors into recommendations, the following can be named. Establishing the Meldcode as compulsory to organizations and their
employees can become more efficient through offering them social support. Facilitating factors are the support from colleagues, managers, families and other organizations. More consultations and deliberations among these stakeholders should be supportive. The support from the AMK as well as from the SHG should become stronger. This can occur in the form of feedback about results and consequences of reporting an abuse and more education and training. The latter could support maternity nurses in using the Meldcode and enhance their knowledge which plays inter alia an important role in maternity nurses’ self-efficacy. Other factors which facilitate the use of the new innovation are maternity nurses’ attitude towards the Meldcode and the effect they expect from using it. Both can be enhanced through educating them about its benefits. Factors such as clarity, completeness et cetera contribute to the success of the innovation as well, so the Meldcode should be formulated clearly and adapted to the work of maternity nurses.

**Limitations and recommendations**

To this day, only little research has been conducted on the use of the Meldcode and the intention to use it, especially among maternity nurses. Further research is needed to support current findings about possible facilitating and impeding factors to use the Meldcode.

In the survey, participants were asked about their own perceptions regarding the use of the Meldcode and their own opinion about carrying out their task. Hence, no actual behavior was measured but only a personal appraisal of the maternity nurses themselves. This greatly contributes to the fact that the results are subjective. Therefore, this study has to be interpreted carefully regarding predicted behavior. In this study, it was tried to objectify the maternity nurse’s behavior, but only their personal perceived intention to behave can be estimated. Being able to make more specific recommendations about the certain steps of the Meldcode, it would be useful to investigate them in particular. Regarding the analysis of the data, the innovation model of Fleuren et al. (2004) could have been used instead of the ASE-model. The advantage of the former is its greater correlation with measured behavior. Concerning the construction of the survey, it could be useful to apply a 7-point Likert Scale instead of a 5-point Likert Scale. The former leads to a greater variance in the data which results in a greater distribution. In this study, a 5-point Likert Scale was used for the sake of simplicity and clarity to the respondents. Additionally, the representativeness as well as the reliability of the research could be raised by a greater amount of participants. Only maternity nurses in the region Twente, The Netherlands, participated which makes it less representative. A cross-sectional study among maternity nurses
in the Netherlands would deliver more representative results. Furthermore, the data collection took place within only two and a half weeks. Not all of the contacted maternity nurses had the chance to participate within this time span. These limitations should be taken into account when interpreting the results.

References


Appendix

Questionnaire

Beste kraamverzorg(st)ers,

het volgende onderzoek gaat over het basismodel van de Meldcode Huiselijk Geweld en Kindermishandeling. De overheid stelt vanaf 1 juli 2013 het handelen volgens de Meldcode landelijk verplicht.

>> Waarom dit onderzoek? <<
Kraamverzorg(st)ers kunnen in de dagelijkse praktijk verschillende knelpunten en belemmeringen ervaren waardoor niet altijd volgens de stappen van de Meldcode wordt gewerkt. Met dit onderzoek willen we hier beter zicht op krijgen. Hierdoor hebben wij de mogelijkheid om jullie in samenwerking met uw organisatie beter te ondersteunen en een betere houvast te geven bij het omgaan met vermoedens van huiselijk geweld en/of kindermishandeling.

>> Volledig anoniem <<
Dit onderzoek is geheel anoniem. Uw gegevens worden strikt vertrouwelijk door de onderzoekers van de Universiteit Twente verwerkt en bewaard.

>> BELANGRIJK! <<
Wanneer u de Meldcode niet of in beperkte mate kent, vragen wij u toch alle vragen in te vullen. Vul de vragen dan in naar uw verwachting over (het gebruik met) de Meldcode.

>> Hoe wordt u geïnformeerd over de resultaten? <<
De belangrijkste uitkomsten van het onderzoek zullen in vorm van een fact-sheet via de kraamzorg organisaties worden verspreid. Dit gebeurt naar verwachting in juli 2013.

Het invullen van de vragenlijst neemt rond 20 minuten in beslag. Alvast hartelijk bedankt voor uw medewerking!

Achtergrondvariabelen

1. Wat is uw geslacht?
   a. man
   b. Vrouw

2. Hoeveel jaar werkt u als kraamverzorg(st)er in de kraamzorg?
   
3. Bij welke organisatie bent u op dit moment werkzaam?
   □ RST Zorgverleners
   □ Lancelot Kraamzorg
   □ Zorggroep Sint Maarten
   □ Zorgbureau Excellent
   □ Attent Kraamzorg
   □ Naviva Kraamzorg
   □ BTK Zorg
   □ VVT Zorgverleners
   □ Ik wil hier geen antwoord op geven
4. Hoe vaak heeft u binnen de afgelopen 12 maanden in uw werkomgeving een vermoeden van huiselijk geweld en/of kindermishandeling gehad?

   keer

5. Bij hoeveel gezinnen heeft u in de afgelopen 12 maanden als kraamverzorg(st)er gewerkt?

   gezinnen

6. Voert u naast uw werk als kraamverzorg(st)er nog een van de volgende nevenfuncties uit?

   □ Intaker
   □ Bereikbaarheidsdienst
   □ Planning
   □ Geen van deze functies

**Bekendheid met de meldcode**

7. In hoeverre bent u bekend met de inhoud van de meldcode?

   □ Ik ken de meldcode niet
   □ Ik ken de meldcode wel maar heb hem (nog) niet doorgelezen
   □ Ik ken de meldcode en heb hem oppervlakkig doorgelezen
   □ Ik ken de meldcode en heb hem volledig en grondig doorgelezen

**Gebruik van de meldcode**

_Het volgende deel gaat over uw gebruik van de meldcode als u vermoedens van huiselijk geweld en/of kindermishandeling heeft. Als u tot nu toe nog geen gebruik van de meldcode hebt gemaakt, dan gaat het om uw verwachte gedrag hiermee._

8. In hoeverre kent u de volgende activiteiten van de meldcode?
   1 (Ik ken deze activiteit helemaal niet) – 5 (Ik weet wat deze activiteit precies inhoudt)

   a. In kaart brengen van signalen die een blijvend vermoeden van kindermishandeling of huiselijk geweld bevestigen of ontkrachten
   b. Signalen vastleggen in het verpleegkundig of zorgdossier
   c. Bespreken van de signalen met een deskundige collega, of een leidinggevende
   d. Advies vragen bij het Advies- en Meldpunt Kindermishandeling (AMK) en/of het Steunpunt Huiselijk Geweld (SHG)
   e. Bespreken van de signalen met de ouders
   f. Op basis van de verzamelde informatie wegen van het risico op kindermishandeling en/of huiselijk geweld
   g. Hulp organiseren
   h. Het vermoeden bij het AMK en/of SHG melden
   i. Actief navraag doen of de behandeling van het gezin begonnen is
9. Ik beschik over voldoende kennis om de meldcode te kunnen gebruiken
   1 (Helemaal mee oneens) – 5 (Helemaal mee eens)

10. Heeft u ooit een vermoeden van huiselijk geweld en/of kindermishandeling gehad?
    Ja (→ vraag 11 / Nee → vraag 12)

11. Bij welk deel van de families bij wie u een vermoeden heeft van huiselijk geweld en/of
    kindermishandeling voert u de volgende activiteiten uit?
    1 Bij geen enkel familie / 2 Een minderheid van de families / 3 Bij sommigen wel, bij sommigen
    niet / 4 Een meerderheid van de families / 5 Alle families

    a. In kaart brengen van signalen die een blijvend vermoeden van kindermishandeling of
       huiselijk geweld bevestigen of ontkrachten
    b. Signalen vastleggen in het verpleegkundig of zorgdossier
    c. Bespreken van de signalen met een deskundige collega, of een leidinggevende
    d. Advies vragen bij het Advies- en Meldpunt Kindermishandeling (AMK) en/of het
       Steunpunt Huiselijk Geweld (SHG)
    e. Bespreken van de signalen met de ouders
    f. Op basis van de verzamelde informatie wegen van het risico op kindermishandeling en/of
       huiselijk geweld
    g. Hulp organiseren
    h. Het vermoeden bij het AMK en/of SHG melden
    i. Actief navraag doen of de behandeling van het gezin begonnen is

Kenmerken van de kraamverzorg(st)er

_Geeft bij de volgende uitspraken aan in hoeverre ze bij u passen. Als u de meldcode nog niet hebt gebruikt
dan geeft uw verwachtingen aan._
1 (helemaal mee oneens) - 5 (helemaal mee eens)

12. De meldcode geeft mij grote houvast bij het omgang met vermoedens van huiselijk
    geweld/ kindermishandeling.

13. Door de meldcode te gebruiken voel ik mij zekerder over de te nemen stappen bij een
    vermoeden van huiselijk geweld/ kindermishandeling.

14. Ik ben bang voor de reactie van het gezin als ik de stappen van de meldcode volg.

15. Ik ben bang dat ik het contact met het gezin verlies als ik bij een vermoeden van huiselijk
    geweld/ kindermishandeling de stappen van de meldcode volg.

16. Het kost mij veel tijd om bij een vermoeden van huiselijk geweld/ kindermishandeling de stappen
    van de meldcode te volgen.

17. Ik vind de meldcode een nuttig instrument voor het werken als kraamverzorg(st)er.
18. Ik verwacht dat het toepassen van de meldcode een bijdrage levert aan het vroegtijdig signaleren en vroegtijdig stopzetten van huiselijke geweld/kindermishandeling.

19. Ik vind dat de volgende activiteiten tot mijn functie behoren
   a. In kaart brengen van signalen die een blijvend vermoeden van kindermishandeling of huiselijk geweld bevestigen of ontkrachten
   b. Signalen vastleggen in het verpleegkundig of zorgdossier
   c. Bespreken van de signalen met een deskundige collega, of een leidinggevende
   d. Advies vragen bij het Advies- en Meldpunt Kindermishandeling (AMK) en/of het Steunpunt Huiselijk Geweld (SHG)
   e. Bespreken van de signalen met de ouders
   f. Op basis van de verzamelde informatie wegen van het risico op kindermishandeling en/of huiselijk geweld
   g. Hulp organiseren
   h. Het vermoeden bij het AMK en/of SHG melden
   i. Actief navraag doen of de behandeling van het gezin begonnen is

20. Gezinnen waarin een vermoeden van huiselijk geweld/kindermishandeling bestaat, zijn over het algemeen tevreden als ik de stappen van de meldcode volg.

21. Gezinnen waarin een vermoeden van huiselijk geweld/kindermishandeling bestaat, werken over het algemeen mee als ik stappen van de meldcode volg.

22. Ik heb een persoonlijke mening over het onderwerp “huiselijk geweld” en deze beïnvloedt mijn houding tegenover de familie.

23. Ik ben bang dat door mijn handelen volgens de meldcode de situatie in de familie slechter wordt.

24. Ik krijg bij het werken volgens de meldcode voldoende ondersteuning als ik die nodig heb van ...
   □ Colleaga’s in mijn team
   □ Verloskundigen
   □ Direct leidinggevende
   □ Het Advies- en Meldpunt Kindermishandeling (AMK)/Steunpunt Huiselijk Geweld (SHG) voor advies
   □ Het AMK/SHG bij het melden van kindermishandeling/huiselijk geweld
   □ Geen van de bovenstaande

25. Hoeveel collega’s in uw organisatie maken volgens u gebruik van de meldcode?
   1 (geen enkele collega) – 5 (alle collega’s)

26. In hoeverre denkt u dat de volgende personen van u verwachten dat u de meldcode gebruikt:
   1 (zeer zeker niet) – 5 (zeer zeker wel)
   a. Cliënten
   b. Collega’s
   c. Leidinggevende
   d. Management
27. Indien u dat zou willen, lukt het u dan om de volgende stappen uit te voeren ...

a. In kaart brengen van signalen die een blijvend vermoeden van kindermishandeling of huiselijk geweld bevestigen of ontkrachten  
b. Signalen vastleggen in het verpleegkundig of zorgdossier  
c. Bespreken van de signalen met een deskundige collega, of een leidinggevende  
d. Advies vragen bij het Advies- en Meldpunt Kindermishandeling (AMK) en/of het Steunpunt Huiselijk Geweld (SHG)  
e. Bespreken van de signalen met de ouders  
f. Op basis van de verzamelde informatie wegen van het risico op kindermishandeling en/of huiselijk geweld  
g. Hulp organiseren  
h. Het vermoeden bij het AMK en/of SHG melden  
i. Actief navraag doen of de behandeling van het gezin begonnen is

### Meldcode

*Geef bij de volgende uitspraken aan in hoeverre ze bij u passen.*

1 (helemaal mee oneens) - 5 (helemaal mee eens)

*Indien u helemaal niet bekend bent met de meldcode, sla dan de vragen 28 t/m 33 over*

28. Ik vind dat de meldcode helder aangeeft welke stappen ik moet uitvoeren.

29. Ik verwacht dat het werken volgens de meldcode bij een vermoeden van huiselijk geweld/kindermishandeling zichtbare uitkomsten binnen het gezin oplevert.

30. De meldcode is te ingewikkeld voor mij.

31. De meldcode past goed bij mijn manier van werken.

32. De meldcode biedt alle informatie en materialen die nodig zijn om er goed mee te kunnen werken.

### Organisatie

*Geef bij de volgende uitspraken aan in hoeverre ze bij u passen.*

33. In mijn organisatie vindt regelmatig terugkoppeling plaats over de meldingen die zijn gemaakt.

1 (helemaal mee oneens) - 5 (helemaal mee eens)

34. In hoeverre vindt u dat er voldoende mogelijkheden (trainings, educatie enz.) zijn om goed met de meldcode om te kunnen gaan?

1 (helemaal niet voldoende) – 5 (absoluut voldoende)
35. In welke mate ervaart u knelpunten in de samenwerking met professionals buiten uw organisatie bij een vermoeden van huiselijk geweld/kindermishandeling?
   1 *(helemaal niet)* – 5 *(helemaal wel)*
   a. Advies- en Meldpunt Kindermishandeling
   b. Steunpunt Huiselijk Geweld
   c. Leidinggevende
   d. Verloskundige
   e. Andere instanties

36. Ik ben van plan om volgens de meldcode te gaan werken/te blijven werken.
   1 *(helemaal mee oneens)* – 10 *(helemaal mee eens)*

37. Wat zou u bij het werken met de meldcode ondersteunen *(Suggesties, tips, ideeën enz.)*

**Einde vragenlijst**

Hartelijk bedankt voor uw medewerking.