Child maltreatment, parents & the emergency department
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CHAPTER 11

SUMMARY & GENERAL DISCUSSION
CHILD MALTREATMENT, PARENTS & THE EMERGENCY DEPARTMENT

SUMMARY
This thesis describes research to assess screening methods for child maltreatment at the emergency department with an emphasis on screening based on parental risk factors and the wellbeing of families of which a parent visited the emergency department due to intimate partner violence, substance abuse or a suicide attempt.

Chapter 1 is an introduction about child maltreatment and the aim of this thesis. Child maltreatment is a worldwide problem, and includes all physical and emotional ill-treatment, sexual abuse, neglect, and exploitation within a dependent relationship that results in actual or potential harm for children under 18 years of age. The exact prevalence is difficult to determine. In The Netherlands, 10% of high school children reported to have been maltreated during the past year, but only 2% of Dutch high school children were known to have been maltreated during the past year by professionals. Several risk factors increase the risk of child maltreatment, such as very low education and unemployment of parents. Factors protecting against child maltreatment include a supportive family environment and social networks. Child maltreatment can have many negative consequences for children, including impaired physical and mental health, and social functioning. Early identification of children who are (at high risk to be) maltreated is the first step to intervene, prevent recurrence and improve outcomes, but it is difficult. In hospitals, several methods to screen for child maltreatment are used, including checklists and a physical examination. A new screening method was introduced in 2007, called the Hague protocol. In this protocol, child maltreatment screening is based on risk factors in parents. All adults attending the emergency department because of intimate partner violence, substance abuse or a suicide attempt are asked whether they have children in their care. If so, these children are reported to Safe Home (in
Dutch: Veilig Thuis, Intimate Partner Violence and Child Abuse Counseling and Reporting Centre). An adapted version of the Hague protocol was implemented in Amsterdam hospitals in 2010, called the Amsterdam protocol. In this protocol, children are identified in the same manner as in the Hague protocol, but instead of a direct report to Safe Home, families are referred to the outpatient pediatric department for an assessment. In this thesis, we aim to assess screening methods for child maltreatment at the emergency department, with an emphasis on screening based on parental risk factors.

Chapter 2 is a description of the results of a survey of all emergency departments in The Netherlands to provide an overview of the used screening methods for child maltreatment, and their empirical substantiation. We identified four main screening methods: a checklist (in 100% of hospitals), a physical examination (in 41%), a screening based on parental risk factors (in 60%) and a retrospective chart review (in 3%). The majority of these screening methods were not substantiated by empirical evidence. We recommend that a universal screening method should be used, but at the time of this study, there was insufficient evidence available to choose one particular method.

Chapter 3 assesses the diagnostic value of the screening physical examination for child maltreatment with a systematic literature review. Studies that evaluated the diagnostic value of a complete physical inspection to screen for maltreatment in children without a prior suspicion in health care settings were included. We could only include three studies, none of which were designed to evaluate the diagnostic accuracy of the screening physical examination. The prevalence of confirmed signs of maltreatment during physical examination ranged between 0.8% and 13.5%, but the study designs were inadequate to assess the diagnostic accuracy of a screening physical examination for child maltreatment. We recommend that clinicians realize that the diagnostic accuracy of the screening physical examination is unclear and that child maltreatment can be over- or under-detected.
**Chapter 4** describes parents’ opinion about screening methods for child maltreatment in general, and about the screening physical examination in particular. First, we systematically reviewed the literature for evidence on parental acceptability of any type of screening for child maltreatment. We included six studies that reported high parental acceptability. We then performed a questionnaire study of parents’ opinion about the screening physical examination of their child at the emergency department. We distributed 1,000 questionnaires, of which 372 were returned. Results indicated a very high parental acceptance of the screening physical examination for child maltreatment. We conclude that parental acceptance forms no threshold for child maltreatment screening.

Evaluation of screening for child maltreatment based on parental risk factors is started in **Chapter 5**. In a retrospective cohort study, we describe the characteristics of families identified in the Amsterdam protocol and their referrals to services during the first two years after implementation of the protocol in one hospital. We included 106 children of 60 families, of which the majority was included because their mother attended the emergency department due to intimate partner violence. Most families attended the outpatient pediatric department voluntarily, and referrals to services were arranged for 99 children, of which 67 on a voluntary basis. We conclude that the Amsterdam protocol seemed successful in arranging support for the majority of identified children, but that a larger prospective study with follow-up data would be necessary to draw more definite conclusions.

**Chapter 6** describes the results of our prospective, multi-center study to evaluate the Amsterdam protocol. We compare our results to the Hague protocol to determine if both protocols can serve as fully commutable alternatives. We included 212 families from the Amsterdam protocol (data gathered from reports by pediatric staff and parents) and 565 families from the Hague protocol (data gathered from Safe Home records and telephone interviews with parents). We found that Safe Home identified more child maltreatment than pediatric staff (98% versus at least 51%), but referrals to
services were similar (82% versus 80% of the total sample) and parents were positive about both interventions. Physical examination of children in the Amsterdam protocol revealed signs of maltreatment in 5%. We conclude that, despite the differences, both procedures can serve as suitable methods to identify and refer children at risk for maltreatment by screening adults presenting with their own medical problems at the emergency department.

Chapter 7 assesses the levels of psychological symptoms of children identified in the Amsterdam protocol in a cross-sectional study in 6 hospitals, in which 89 families participated (46% of all eligible families). Parents and children of 8 years and older filled out questionnaires measuring posttraumatic stress, anxiety, depression, behavioral problems and health-related quality of life. We found no differences between the children in the Amsterdam protocol whose parents visited the emergency department due to intimate partner violence, substance abuse or a suicide attempt, and children from community samples. One third (35%) of the children in the Amsterdam protocol did score in the range of ‘probable posttraumatic stress disorder’, therefore we advise health care providers to pay attention to posttraumatic stress symptoms when treating these children.

A follow-up of the families in the Amsterdam protocol with a description of their wellbeing and involvement of support services one year after the emergency visit of parents is reported in Chapter 8. To compare our results to the Hague protocol, we included families from a hospital using the Hague protocol in Groningen. We found that 20% of all children in the Amsterdam protocol were involved with child protective services in the year after the emergency visit; in Groningen this proportion was higher. Psychosocial problems of children in the Amsterdam protocol were similar compared to their first assessment. Parents reported high rates of personal adverse life experiences, and were mostly positive about the Amsterdam protocol, although 12% indicated that they were discouraged to visit the emergency department again in a future, similar situation. We conclude that the Amsterdam protocol can be a valuable way of screening children
and referring them to voluntary services. However, because problems are ongoing for a minority of families, health care providers need to monitor if voluntary services have the desired impact, and if not, report children to child protective services.

**Chapter 9** describes two cases of the ‘child check’ (in Dutch: ‘kindcheck’) at the emergency department. The child check is a new policy, mandated by the Dutch government in 2013, stating that health care professionals caring for adults with psychosocial problems are obligated to screen their children for maltreatment. We report two cases in which a family was referred to the outpatient pediatric department because the mother attended the emergency department due to intimate partner violence. In the first case, the mother wanted help and she and her daughter were referred to voluntary social and psychiatric health care. In the second case, the mother refused to visit the outpatient pediatric department, and in the end, the family was referred to the Youth Care Office for more severe measures.

**Chapter 10** discusses in which situations and under which conditions personal data of children may be used in studies about maltreatment without obtaining informed consent. We argue that, although, in principle, data research is only acceptable after informed consent is obtained, the law should allow that, under specific circumstances and safeguards, this requirement is put aside to make research in the field of child abuse and neglect possible.

**GENERAL DISCUSSION**

The research described in this thesis focuses on the evaluation of screening methods for child maltreatment at the emergency department based on parental risk factors, and on the wellbeing of families who were involved. We will discuss our main findings and compare our results to the results of other recent studies and to social developments and we will discuss the implications and conclusions of this thesis.
SCREENING METHODS

Early detection of child maltreatment is important in order to intervene in the situation and improve children’s lives. Unfortunately, it can be very difficult to identify child maltreatment and therefore many different screening methods have been proposed. In the winter of 2012 – 2013, we conducted a survey among all Dutch emergency departments to identify all screening methods for child maltreatment that were used (Chapter 2 of this thesis). At that time, all emergency departments reported to use a screening checklist in attending children (as mandated by the Dutch Health Care Inspectorate 1) and, in addition, 60% used a screening based on parental risk factors, 41% a screening physical examination and 3% a retrospective review of charts of attending children. Empirical evidence for the effectiveness of the reported screening methods was largely lacking. Only one of the used checklists in children, the Escape Form, had been evaluated and was found to increase child maltreatment detection 2, but it’s diagnostic accuracy was not known. In addition, one study had found that retrospective chart review by a nurse increased child maltreatment detection 3. Other than that, the screening methods used at Dutch emergency departments to detect child maltreatment had not been evaluated. Although not desirable, this is somewhat understandable because research about the diagnostic accuracy of screening tests for child maltreatment is challenging. No true ‘gold standard’ for child maltreatment exists and therefore derived standards have to be used, such as a diagnosis by a legal court, expert panel or self-report. Furthermore, the diagnostic accuracy, in particular positive and negative predictive value, depends on the prevalence of the population that is screened. In health care settings such as the emergency department or general practice, the prevalence of maltreatment in attending children is low, resulting in low positive predictive values and high negative predictive values of screening tests.

In the (almost) 3 years following our survey, additional research to evaluate screening methods for child maltreatment at the emergency department has been performed, both research described in this thesis and research
from other studies, the results of which we will describe below.

Checklists
The diagnostic accuracy of three different checklists -although with partly similar questions- (Escape Form, SPUTOVAMO and SPUTOVAMO-R) used at Dutch emergency departments have been studied and reported after our survey. Results and conclusions of these evaluation studies were somewhat contradictory. See Table 1 for details. The first study evaluated the diagnostic accuracy of the Escape Form in three Dutch hospitals 4. The target condition was any type of maltreatment in children up to 18 years attending the emergency department for any reason. Sensitivity of the Escape Form was 0.80 (95% CI 0.67-0.89), specificity 0.98 (95% CI 0.98-0.99) and the positive predictive value was 0.1 (95% CI 0.08 – 0.14) 4. The authors conclude that the Escape Form is a useful method to identify children at high risk for potential child maltreatment 4. In the second study, the diagnostic accuracy of the SPUTOVAMO-R was evaluated in four Dutch hospitals 5. The target condition was physical abuse in children 0-7 years attending the emergency department for any reason. Of 4235 children, only 3 cases of confirmed physical abuse were found, resulting in a SPUTOVAMO-R sensitivity of 1 (95% CI 0.29 - 1), a specificity of 0.87 (95% CI 0.84 – 0.89) and a positive predictive value of 0.03 (95% CI 0.01 - 0.09). The authors conclude that the use of SPUTOVAMO-R ensures detection of physical abuse, although false positive rates are high 5. However, the third evaluation study of the SPUTOVAMO led to a different conclusion 6. The target condition was any type of maltreatment in children 0-18 years attending one Dutch emergency department for any reason. Sensitivity of SPUTOVAMO was 0.74 (95% CI 0.64 – 0.82) and specificity 0.97 (95% CI 0.97 – 0.98) with a positive predictive value of 0.24 (95% CI 0.17 - 0.34), although test performance was somewhat better in children presenting with an injury. The authors conclude that hospitals should take these results into careful consideration before deciding to implement the SPUTOVAMO and suggest that continuing education of emergency department staff about child maltreatment, and perhaps the use of a single screening question to
<table>
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<tr>
<td>Escape Form 4</td>
<td>Prospective cohort study in three Dutch emergency departments, 2008-2009</td>
<td>All children (except known abused) 0-17 years attending the emergency department, n = 18,275</td>
<td>Diagnosis by expert panel of potential child abuse (any type) based on review of clinical records, 2.3% of all Escape Forms positive</td>
<td>sens⁴ 0.8 (95% CI 0.67-0.89) spec⁴ 0.98 (95% CI 0.98-0.99) ppv⁴ 0.1 (95% CI 0.08-0.14) npv⁴ 0.99 (95% CI 0.997-0.999)</td>
<td>Escape Form only completed in 48% of eligible children; reference standard based on limited information; confirmed child abuse unknown; no follow-up; no reference standard for screened negatives</td>
</tr>
<tr>
<td>SPUTOVAMO-R 3</td>
<td>Prospective cohort study with 6-months follow-up in four Dutch emergency departments, 2009-2010</td>
<td>Children 0-7 years (except known abused) attending the emergency department because of an injury, n = 4235</td>
<td>Diagnosis by expert panel of physical abuse based on review of clinical records, extensive additional information and 6-months follow-up including a random sample of screened negatives, 2.6% of all SPUTOVAMO-R positive</td>
<td>sens³ 1 (95% CI 0.29-1) spec³ 0.87 (95% CI 0.84-0.89) ppv³ 0.03 (95% CI 0.01-0.09) npv³ 1 (95% CI 0.99-1)</td>
<td>Narrow definition of physical abuse resulting in only 3 confirmed cases</td>
</tr>
<tr>
<td>SPUTOVAMO 6</td>
<td>Prospective cohort study with 6-months follow-up in one Dutch emergency department, 2011-2013</td>
<td>All children 0-17 years attending the emergency department, n = 17,229</td>
<td>Diagnosis by expert panel of any type of maltreatment based on review of clinical records, extensive additional information and 6-months follow-up data from child protective services for all screened negatives, 3.5% of all SPUTOVAMO positive</td>
<td>sens⁶ 0.74 (95% CI 0.64-0.82) spec⁶ 0.97 (95% CI 0.97-0.98) ppv⁶ 0.24 (95% CI 0.17-0.34) npv⁶ 1 (95% CI 1-1)</td>
<td>SPUTOVAMO only completed in 46% of eligible children</td>
</tr>
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⁴ Sens = sensitivity; ⁵ Spec = specificity; ⁶ PPV = positive predictive value; ⁷ NPV = negative predictive value.
make sure the possibility of child maltreatment is considered, could be equally, or even more, important.

Physical examination
To determine the diagnostic accuracy of a screening physical examination to detect child maltreatment (during which also an unkempt appearance, abnormal physical and emotional development, behaviour and parent-child interaction can be observed), we performed a systematic review in 2013 (Chapter 3 of this thesis). We could only include three studies, of which two were situated at the emergency department, and, due to the designs of the studies, we could not determine the diagnostic accuracy of the screening physical examination for child maltreatment. Since then, two additional studies evaluating the physical examination have been performed. First, in the evaluation study of the Escape checklist (described above), the screening physical examination was evaluated as well because one of the questions included findings of the physical examination. A low sensitivity of 0.17 (CI 0.09-0.3) was found for the physical examination, and the authors conclude that either the examination was not performed properly, or sensitivity was indeed only minimal. Because of the effort, time and patient burden of a physical examination, the authors argue that it could be feasible to remove the physical examination from the Escape checklist, although on the other hand, it might be best to err on the side of inclusion. Recently, the diagnostic accuracy of the physical examination to screen for maltreatment in children 0-18 years attending the emergency department for any reason was evaluated in the same study which evaluated the SPUTOVAMO checklist (described above). The authors found a sensitivity of 0.47 (95% CI 0.35 – 0.59) and a specificity of 0.97 (95% CI 0.96 – 0.97), with a positive predictive value of 0.15 (95% CI 0.08 – 0.25) and conclude that the physical examination is not suitable as a screening instrument for child maltreatment. Taking these two additional studies into account as well, we argue that the physical examination is not a good method to detect maltreatment in children without a prior suspicion (with a low pre-test risk of maltreatment), and it should not be used as a universal child maltreatment screening at the
emergency department. Obviously, the physical examination has an important role in the evaluation of children who are (suspected of) being maltreated and have a much higher pre-test risk. Also, it may be valuable in other children with a high risk for maltreatment, such as the children described in this thesis, whose parents visited the emergency department due to intimate partner violence, substance abuse or a suicide attempt. We found that signs of maltreatment were revealed in 5% of the physical examinations, which may be a high enough number to argue that it should be continued in this specific group of children (Chapter 6 of this thesis). On the other hand, we do not know if the results of the physical examination positively influenced clinical decisions and, ultimately, the true status of the children, i.e. whether the suspicion of maltreatment was confirmed.

PARENTAL RISK FACTORS

Just because screening for maltreatment based on characteristics of children attending emergency departments is difficult, screening based on risk factors for child maltreatment in parents was developed as a new approach in 2007, called the Hague protocol 7. Following the first results of the Hague protocol indicating that the detection of child maltreatment in hospitals increased indeed, other hospitals started implementing (a variation of) the Hague protocol as well. On July 1st, 2013, the Dutch government mandated a new policy stating that all health care professionals should implement a ‘reporting code domestic violence and child abuse’, which includes a ‘child check’, a screening based on risk factors for maltreatment in parents 8. According to the guideline of the Royal Dutch Medical Association (Dutch abbreviation: KNMG), after identifying children at risk for maltreatment, physicians can either choose to report children to Safe Home (the Intimate Partner Violence and Child Abuse Counseling and Reporting Centre, in Dutch: Veilig Thuis), or, in agreement with Safe Home, they can initiate and monitor voluntary support themselves 9.
Hague protocol
In the original Hague protocol, all adults attending the emergency department seeking medical care due to intimate partner violence, substance abuse or a suicide attempt, are asked whether they have children under 18 years in their care. If so, all these children were reported to the Child Abuse Counseling and Reporting Centre (in Dutch: Advies en Meldpunt Kindermishandeling, AMK), and to Safe Home before 2015 and since January 2015, respectively. The Hague protocol was evaluated and the AMK conclusion on the presence of maltreatment was used as a reference standard. The authors found that child maltreatment was confirmed in 91% of the identified children and they strongly urge others to add this protocol to their local guidelines. Clearly, the Hague protocol is effective in detecting child maltreatment, and for hospital staff the protocol is easy and quick to use. On the downside, the task of investigating all identified children is a significant burden for Safe Home, which may not always be necessary, and the experience of being reported to Safe Home may be upsetting for families.

Amsterdam protocol
In 2010 in Amsterdam, a variation of the Hague protocol was developed. In this ‘Amsterdam protocol’, children are identified in the same manner as in the Hague protocol, but instead of a report to Safe Home, children are referred to the outpatient pediatric department for an evaluation and further referrals to services if necessary. Only in severe circumstances, or if parents refuse to cooperate, children are reported to Safe Home. This way, more emphasis was put on voluntary referrals to services, without active Safe Home involvement, which was thought to be equally effective but less upsetting to parents. In contrast to the Hague protocol, a physical examination of the children was included. The possibility was considered that parents might be unwilling to cooperate with the Amsterdam protocol voluntarily, and that it could be time-consuming for hospitals. On September 22, 2010, representatives of all six Amsterdam hospitals and youth care services signed an agreement to implement this Amsterdam protocol. In practice however, implementation was only completed in all hospitals in
early 2013. We evaluated the Amsterdam protocol and compared our results to the Hague protocol (Chapter 6 of this thesis). We found that, although less maltreatment was detected by hospitals compared to Safe Home in the Hague protocol (we think this is mostly caused by different interpretations of the definition of child maltreatment), the proportion of children referred to services was similar. The large majority of parents did cooperate with the protocol, but some Amsterdam hospitals found the workload (too) hard. We asked parents and children in the Amsterdam protocol to report about children’s psychological problems (Chapters 7 and 8 of this thesis). Contrary to our expectations, and although there may be some underestimation due to selection bias, participating children did not experience more problems than community children, neither shortly after the emergency visit of their parents nor a year later. However, 20% of the children in the Amsterdam protocol were involved with Safe Home or the Child Care and Protection Board (in Dutch: Raad voor de Kinderbescherming, RvdK) in the year after their parents’ visit, indicating severe, ongoing problems.

**IMPLICATIONS**

In conclusion, although at least 51% (Amsterdam protocol) and 98% (Hague protocol) of children whose parents visit the emergency department due to intimate partner violence, substance abuse or a suicide attempt were suspected or confirmed to be maltreated, we argue that not all of these families need active intervention of Safe Home. The definition of child maltreatment (‘all physical and emotional ill-treatment, sexual abuse, neglect, and exploitation within a dependent relationship that results in actual or potential harm for children under 18 years of age’) is broad, and not very specific, and being maltreated according to the definition does not automatically translate into a need of severe child protection measures. Especially in the current time, when major health care budget cutbacks are made, it is important to critically appraise what type of care should be provided by child maltreatment physicians at Safe Home, and what type of care can best be provided by hospitals or community services. Several results
of the research described in this thesis do not support a policy of reporting all children of parents visiting the emergency department due to intimate partner violence, substance abuse, or a suicide attempt to Safe Home. Most families (at least 62%, possibly more, but not all families were invited to the outpatient pediatric department) participated voluntarily with a hospital-based intervention; the large majority of the children (80%) were not involved with Safe Home or the RvdK in the year after the emergency visit (although we can not exclude that more children needed help but were not reported to these organizations); participating children did not report more psychological problems than a reference population; and most parents reported improved wellbeing at follow-up. However, hospitals and Safe Home do need to keep in mind that a considerable minority of these children (20% and possibly more if some children needed help but were not reported to Safe Home or the RvdK) are in need of serious help. If hospital staff is properly educated, they can make a first assessment of the severity of the family problems, and, in consultation with Safe Home, organize appropriate further steps. This stepped-care approach is in line with the way other suspicions of child maltreatment (not based on parental risk factors) are handled by hospitals. Obviously, the quality of this approach depends heavily on the knowledge and skills of the frontline hospital staff, which emphasizes the need for frequent, high quality education. It is reassuring that according to the KNMG guideline, Safe Home needs to be consulted for any suspicions of child maltreatment, thus decreasing the risk that hospitals underestimate problems. Given the high prevalence and heterogeneity of child maltreatment, it is not feasible for Safe Home to handle all suspected cases themselves. If child maltreatment is considered a public, shared responsibility, and a part of regular tasks for all health care professionals including hospital staff, adequate funding needs to be available to enable sufficient care. An important barrier for hospitals at this point is that they do not receive funding if families in the Amsterdam protocol do not show up at their appointments at the outpatient pediatric department, even if pediatric staff has spent a lot of time in assessing the situation and reaching the family.
PARENTS’ OPINION

Although it has received relatively little attention in the literature on child maltreatment, parents’ opinion about a screening method for child maltreatment is an important consideration as well, for two reasons. First, especially in universal screening, or screening in children with a low maltreatment risk, the large majority of families will not benefit from screening, but may experience associated harm. Second, hospital staff may be more inclined to screen for maltreatment if they feel that parents accept the screening and are willing to cooperate. In the research described in this thesis, we studied parents’ opinion about child maltreatment screening in several ways. First, we systematically searched the available literature for parent’s opinion about any screening for child maltreatment. We found only 6 studies, in which a large majority of parents favored screening (Chapter 4 of this thesis). We then performed a questionnaire study at the emergency department, the results of which indicated that parents’ acceptance of a screening psychical examination for child maltreatment was high. We also asked parents’ opinion about screening for child maltreatment based on parental risk factors. Parents visiting the outpatient pediatric department in the Amsterdam protocol (a selection of all parents whose children were referred due to their emergency department visit) indicated high satisfaction with their relationship with the clinician, and in a small study, most parents rated the Hague protocol as (reasonably) acceptable. At follow-up, parents rated the Amsterdam protocol with a median score of 8 on a 1 (worst) to 10 (best) scale. However, this may be somewhat overestimated due to selection and attrition bias. A minority of parents (12%) indicated that they were discouraged from visiting the emergency department in a similar future situation, which is a very undesirable effect that healthcare providers should take into careful consideration.

In conclusion, earlier research and the results of this thesis all support the finding that the large majority of parents favors screening for child maltreatment, which might be encouraging for frontline hospital staff when performing the screening.
PREVENTION AND INTERVENTION

In the end, challenging as it is, screening for and diagnosing maltreatment might be the easy part of child protection. After establishing problems and a need for support, the really difficult part of solving problems that are often chronic and complex, and making real, sustainable improvements in children’s lives starts. It is important that future research will focus on improving these interventions for maltreated children, because, unfortunately, children are currently not always doing better after child protection interventions. A recent study in The Netherlands showed that self-reported quality of life of maltreated children after a Safe Home report increased only initially, and decreased thereafter at 1 and 1.5 years follow-up to beneath the starting point \(^2\). A study in the US found that over 60% of infants who remained at home after they were reported to Child Protective Services, were reported again within five years \(^3\). Also in The Netherlands, 60% of all reports in a random sample of Safe Home reports were re-reports \(^4\), and 50% of families coming into care because of severe intimate partner violence, still experienced violence 1.5 years later \(^5\). The results of the research described in this thesis support a chronicity of problems in a rather large minority of the families as well. Problems were recurrent in at least a third of parents attending the emergency department, and at the 1-year follow-up assessment, a third of the parents reported intimate partner violence during the year after the emergency visit. Because of the recurrence of these problems and the difficulty of providing adequate interventions, ideally, child maltreatment should be prevented, for example with the Nurse-Family Partnership (NFP, in Dutch: Voorzorg), an effective primary prevention program \(^6\). Also for the families described in this thesis, who experience intimate partner violence, substance abuse or psychiatric problems of parents, (secondary) prevention of maltreatment could be possible. If adequate support for parents is offered in an early stage, further escalation of problems causing harm to their children may be prevented. However, preventing child maltreatment altogether seems impossible, and we should also focus on improving interventions. Although several evaluated
interventions exist in The Netherlands (e.g. Triple P, Families First, Parent-Child Interaction Therapy), there are problems with the implementation of these programs, effects are often small or mixed (effective only for some outcomes or in some studies), and residual problems remain. The families in the research described in this thesis received support from many different services, and we do not know which services were effective, and, ultimately, if families in the Amsterdam protocol have a different long-term quality of life compared to families in the Hague protocol. In order to truly determine effectiveness and outcomes of individual interventions or services, ideally, a future study should be a trial comparing families who are randomly assigned to certain services, with a long-term detailed follow-up of patient-reported outcomes, in addition to outcomes based on child protection registries. If this is not feasible, an alternative design could be a cohort study in which families assigned to a limited number of standardized services are compared. In any case, collaboration of all organizations involved is absolutely required. During the research for this thesis, it was sometimes difficult to establish collaboration with involved organizations and, unfortunately, we did not always succeed, which impairs the quality of our study. Even when organizations did commit to participate, it was not always carried out in practice. Of course, resources and available time are limited for many healthcare organizations and it is understandable that research is not always considered a priority. Nevertheless, in order to really improve children’s lives, the best possible interventions need to be used. Given the current rates of prevalence and recurrence, it is hard to defend that interventions of which the effects are not established are used in child protection. We argue that research into the effectiveness of interventions in child maltreatment should be high on the priority list, and any competitiveness between organizations should never be an issue.
CONCLUSIONS

In this thesis we described the assessment of several methods of screening for child maltreatment at the emergency department, with an emphasis on screening based on parental risk factors. We conclude that, although all Dutch emergency departments (are mandated to) use a screening checklist in attending children, study results about the effects are controversial. Another screening method, a complete physical examination, is not effective to use as a universal screening method for child maltreatment at the emergency department. When parents attend the emergency department because of intimate partner violence, substance abuse or a suicide attempt, their children are at high risk for child maltreatment, but do not experience more psychological problems than community children. The Amsterdam protocol of referring these families to the outpatient pediatric department seems to be a useful method. Finally, participating parents are predominantly positive and accepting of child maltreatment screening. We encourage further research aimed to improve the effectiveness of interventions and services for families after child maltreatment detection. We hope that the results of the research described in this thesis will be useful to assist with decision-making about child maltreatment screening in practice.
REFERENCES
