Child maltreatment in numbers : a multimethod study of year prevalence rates and risk factors

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7 General discussion

The general aim of this thesis was to examine the prevalence of child maltreatment in different populations in the Netherlands and investigate which children are more at risk than others. In the current series of studies we used a multimethod approach to assess prevalence rates of different types of maltreatment. In Chapter 2, the prevalence of child maltreatment in the general Dutch population was addressed, which served as a comparison group for populations that were examined in the other chapters: children in regular out-of-home care (Chapters 3 and 4) and children with intellectual disabilities in out-of-home care (Chapter 5). The victimization of group care workers in residential care settings was addressed in Chapter 6. Because of the identical methodologies used in the various populations, we were able to compare the prevalence rates of different types of child maltreatment between populations. In this final chapter, the main findings from the current series of studies are summarized and discussed in light of implications for research and policy aimed at preventing child maltreatment.

Year prevalence estimates

The second Netherlands' Prevalence study on Maltreatment of children and youth (NPM-2010), described in Chapter 2, showed overall year prevalence rates of 118,836 children or 33.8 per 1,000 children between 0 and 17 years of age based on combined reports from sentinels and Child Protective Services (CPS), and 97,610 adolescents or 99.4 per 1,000 adolescents between 12 and 17 years of age based on self-reports. When controlled for age, the estimate based on self-report was nearly five times higher than the estimate based on sentinel and CPS reports. Moreover, year prevalence estimates in 2010 based on both sentinel and self-report data were not different from the year prevalence of child maltreatment in 2005, whereas the number of CPS reports increased with 67% in this 5-year period. This indicates that although the actual year prevalence of child maltreatment remained relatively stable, the awareness about child maltreatment in the Netherlands has increased and professionals have become more likely to report cases to CPS.

We also examined the year prevalence of different types of maltreatment, based on sentinel and CPS data. Emotional and physical neglect were the most frequently occurring types of maltreatment, with year prevalence rates of 19.8 and 10.2 per 1,000 children respectively (Chapter 2; see Appendix I for elaborate definitions). Sexual abuse was the least prevalent type of maltreatment: 0.8 per 1,000 children experienced this type of maltreatment in 2010 according to the sentinels. In addition, different types of maltreatment co-occurred in nearly half of all cases.

Although we examined the year prevalence of all different types of maltreatment in the NPM-2010, the focus of the out-of-home care study was on sexual and physical abuse.

Therefore, comparisons of year prevalence rates in different populations as described in Chapters 3 to 6 were solely based on these types of abuse. Year prevalence rates of sexual (SA) and physical abuse (PA) in these populations based on sentinel and self-report are shown in Figure 1. The 84% confidence intervals (CIs) in this figure indicate a probability of overlap of approximately 5%, and therefore, if CIs of two estimates do not (partly) overlap, year prevalence rates are assumed to be significantly different (Goldstein & Healy, 1995; Julious, 2004; Payton, Greenstone, & Schenker, 2003). First, adolescents in out-of-home care reported significantly more sexual (143 per 1,000) and physical abuse (254 per 1,000) than adolescents in the general Dutch population (Figure 1a; Chapters 3 and 4). Self-reported year prevalence rates in a general Dutch population sample matched with the out-of-home care sample on ethnicity and education were 74 per 1,000 for sexual abuse and 95 per 1,000 for physical abuse. Furthermore, as presented in Chapters 3 and 5, the year prevalence estimates of sexual abuse based on sentinel reports in out-of-home care for non-disabled children (3.5 per 1,000) and for children with a mild intellectual disability (9.8 per 1,000) were also significantly higher than the year prevalence in the general Dutch population (Figure 1b). Thus, children in out-of-home care have an increased risk for sexual and physical abuse compared to children living with their (biological) parents.

A recent series of meta-analyses examined the prevalence of child maltreatment across the globe (Stoltenborgh, Bakermans-Kranenburg, Van IJzendoorn, & Alink, 2013; Stoltenborgh, Van IJzendoorn, Euser, & Bakermans-Kranenburg, 2011). Worldwide prevalence rates of sexual and physical abuse reported in those meta-analyses are also shown in Figure 1. Based on self-report, year prevalence rates of sexual and physical abuse in the general Dutch population are significantly lower than global prevalence estimates (Figure 1a). In contrast, the year prevalence of sexual and physical abuse in out-of-home care did not differ from the global prevalence. Comparisons with global prevalence rates based on sentinel studies were not significantly different for any of the populations or types of abuse (Figure 1b). However, differences between the absolute year prevalence estimates of sexual abuse were in the expected direction: The year prevalence of sexual abuse in the Dutch population was somewhat lower than the global prevalence, while the year prevalence in out-of-home care was approximately equal.

The difference between the Dutch and the global prevalence based on self-report can partly be explained by the period of prevalence. Self-report studies included in the meta-analyses reported life-time maltreatment experiences, whereas in the current studies we assessed year prevalence, which refers to the total number of children experiencing child maltreatment in a specific year. The same meta-analyses showed that a longer period of prevalence generally yields higher prevalence rates (e.g., Stoltenborgh et al., 2011). This issue may be less relevant in the comparison of prevalence rates based on sentinel reports, because the majority of sentinel studies included in the meta-analyses covered a one-year period, similar to the sentinel studies presented in the current thesis.

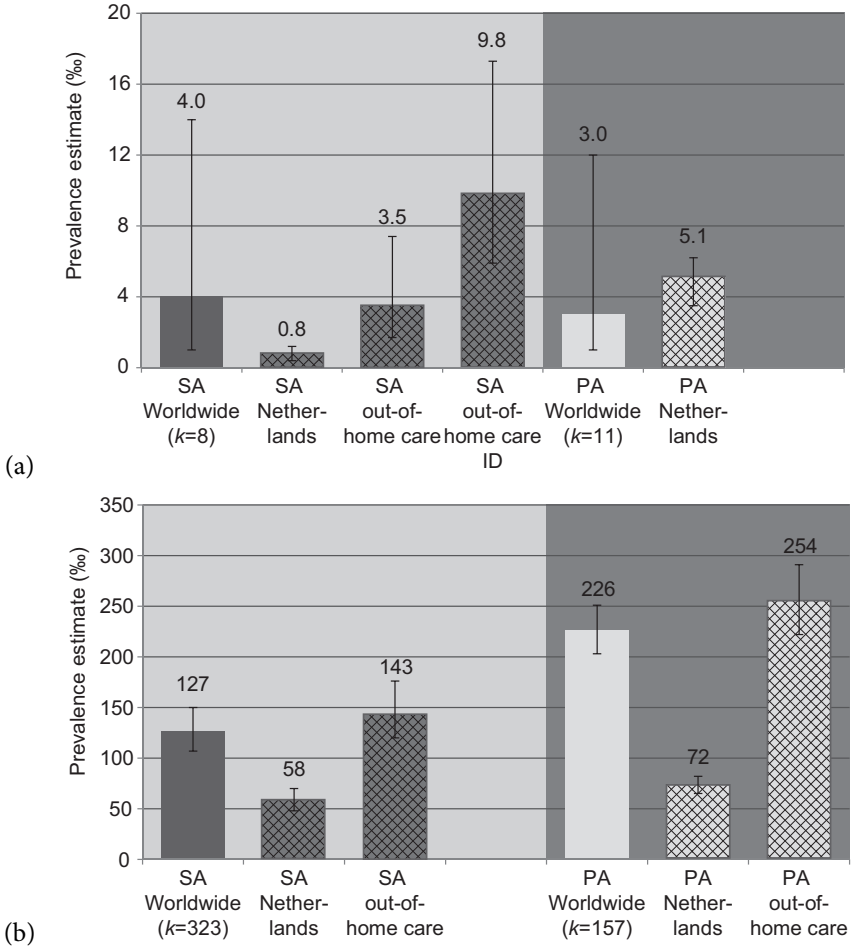

Figure 1. Prevalence estimates (‰) with 84% confidence intervals for sexual and physical abuse, worldwide, in the general Dutch population, and in Dutch out-of-home care, based on (a) sentinel and (b) self-report measures. Missing bars indicate that the prevalence was not examined in that population.
Note. SA = Sexual abuse; PA = Physical abuse; ID = Intellectual Disability

Vulnerable populations

According to the ecological-transactional model (Belsky, 1980, 1993; Cicchetti & Valentino, 2006), the etiology of child maltreatment can be explained by risk and protective factors from different levels: individual factors, familial factors, and factors related to the community or culture. Interactions between such risk and protective factors may explain the risk of child maltreatment. In the current series of studies we found large differences in risk of child maltreatment between various (sub)populations. The factors that contributed

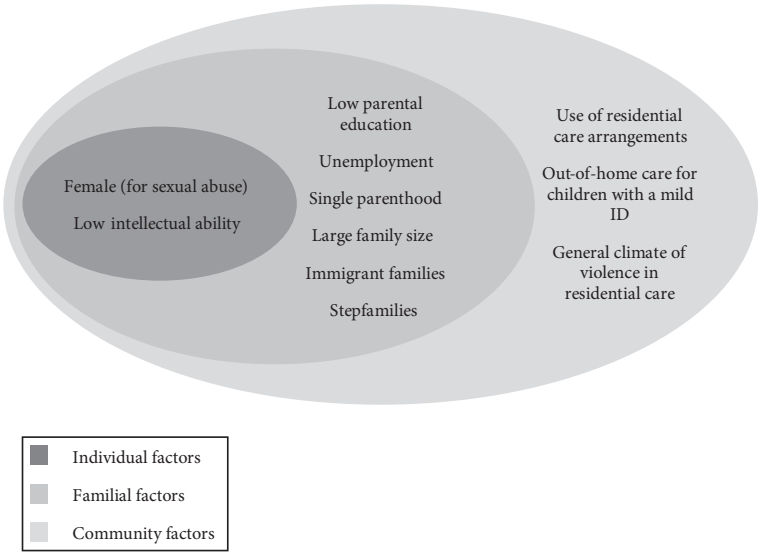

Figure 2. Risk factors for child maltreatment in the ecological-transactional model.
Note. ID = Intellectual Disability

significantly to a higher risk of child maltreatment can be located in one of the first three levels from the ecological-transactional model: the individual, familial, or contextual level (Figure 2). The strength of each of these risk factors is shown in Figure 3, separately for sentinel, CPS, and self-report data.

Individual risk factors. On the most proximal, individual level, girls were identified as more vulnerable for experiencing child sexual abuse. In the NPM-2010 girls had an eight times higher risk of sexual abuse compared to boys based on sentinel reports and a two times higher risk based on CPS reports (Chapter 2). Moreover, in out-of-home care, the large majority (81%) of the victims of sexual abuse reported by the sentinels were female (Chapters 3 and 5). Three meta-analyses on the worldwide prevalence of child sexual abuse also found higher prevalence rates for girls (Barth, Bermetz, Heim, Trelle, & Tonia, 2013; Pereda, Guilera, Forns, & Gómez-Benito, 2009; Stoltenborgh et al., 2011). Although the actual prevalence of sexual abuse of girls may be higher compared to boys, underreporting of sexual abuse of boys has been suggested as an important issue. On the one hand, professionals may be less aware of sexual abuse of boys (Maikovich-Fong & Jaffee, 2010), and on the other hand, boys themselves may be reluctant to disclose their sexual abuse because they feel weak or are afraid to be labeled as homosexual (Romano & DeLuca, 2001). Moreover, definitions of sexual abuse as used in prevalence studies may especially capture the nature and characteristics of sexual abuse of girls, and be less adequate for male sexual abuse (Pereda et al., 2009).

Children with low intellectual abilities are another vulnerable population. As described

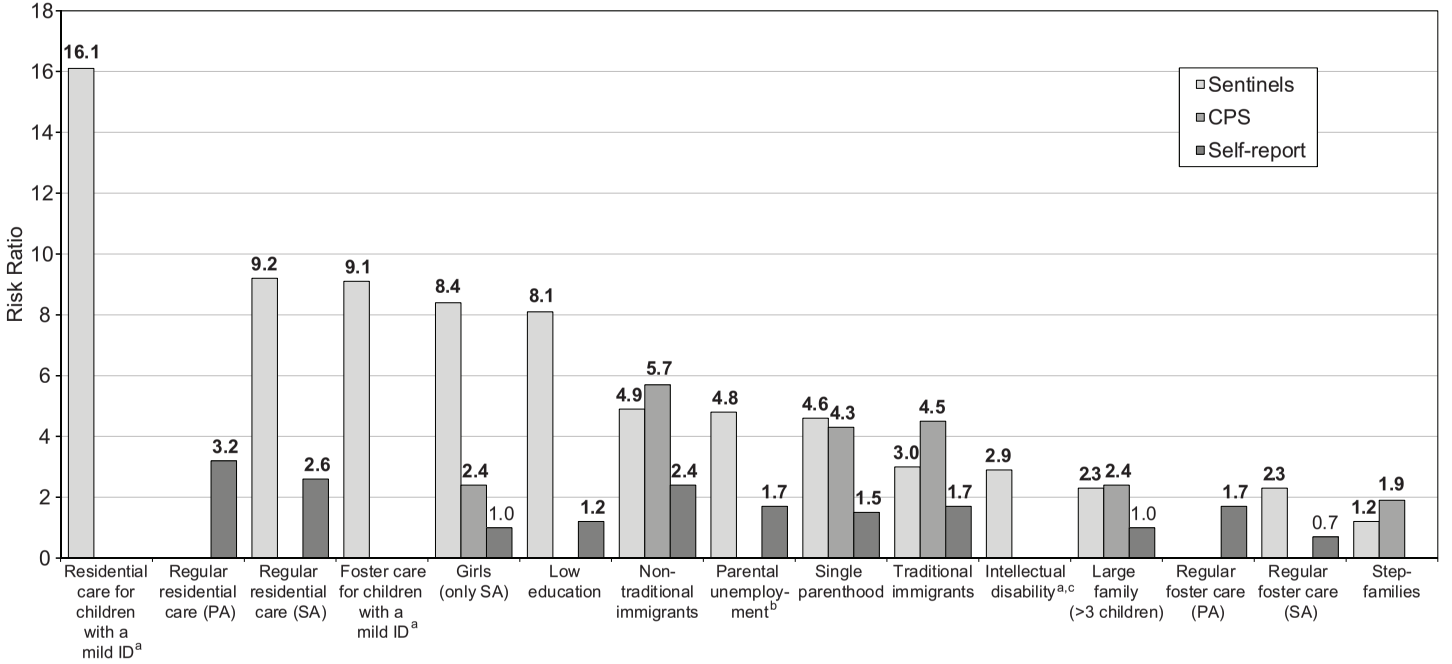

Figure 3. Risk ratios for child maltreatment based on Sentinel reports, CPS reports, and Self-report. Missing bars indicate that the effect of the risk factor could not be tested. Significant risk factors are shown in boldface.

Note. ID = Intellectual disability; SA = Sexual abuse

[a] Risk ratios for children with intellectual disabilities are only based on sexual abuse. [b] Unemployment is combined with family wealth in the self-report study. [c] Risk ratio for children with intellectual disabilities is based on the out-of-home care sample.

in Chapter 2, adolescents with a lower educational level (prevocational secondary education) in the general Dutch population reported more child maltreatment than adolescents with a high educational level (higher general secondary educational level or pre-university education). Furthermore, findings in Chapter 5 indicated that the risk of child sexual abuse in out-of-home care for children with a mild intellectual disability was nearly three times higher compared to regular out-of-home care. In the out-of-home care study, we only tested the risk of sexual abuse in children with an intellectual disability. Children with intellectual disabilities often have a lower understanding of sexuality, impaired communicative skills, and a decreased ability to recognize inappropriate sexual advances, or disclose sexual abuse experiences, which makes them 'easy' targets for sexual abuse (McGuire & Bayley, 2011). However, based on findings from the NPM-2010 (Chapter 2) and earlier studies (e.g., Spencer et al., 2005; Sullivan & Knutson, 2000), it may be expected that children with intellectual disabilities are also more vulnerable to become victim of other types of maltreatment. Because of the higher dependency of children with an intellectual disability, taking care of such a child may be exhaustive and stressful for the parent or caregiver. Parents may feel frustrated when their child does not respond to verbal guidance, which may increase the risk of physical or emotional abuse (Hibbard et al., 2007; Weisleder, 2011). Finally, the higher needs of children with disabilities may increase the risk of neglect, when the parent or caregiver fails to provide adequate education or (medical) care (Hibbard et al., 2007).

Familial risk factors. Based on the findings from the NPM-2010 (Chapter 2), we identified several risk factors for child maltreatment on the familial level (Figure 2). First, factors associated with a low socio-economic status (i.e., low parental education and unemployment of both parents) and factors related to family composition (i.e., single parent families and families with three or more children) increased the risk of child maltreatment. The significance of these risk factors was also indicated in a meta-analysis examining the strength of 39 risk factors on the etiology of physical abuse and neglect (Stith et al., 2009). The influence of these two risk factors may be explained by their association with more stress in the family and limited social support, which in turn have frequently been related to an increased risk of child maltreatment (e.g., MacKenzie, Kotch, & Lee, 2011; Slack, Holl, McDaniel, Yoo, & Bolger, 2004). For instance, in line with the family stress model, the stressful experience of economic hardship may cause less involved and more negative parenting behavior (Conger & Donnellan, 2007).

Second, we found that immigrant status of a family leads to a higher vulnerability to experience child maltreatment. Although the increased risk was found for both traditional (Turkish, Moroccan, Surinamese, or Antillean), and nontraditional immigrant families (African [except Moroccan], Central Asian, Eastern European, South- and Central American), the risk for traditional immigrant families disappeared after we controlled for parental education or step-parenthood (Alink, Euser, Bakermans-Kranenburg, & Van IJzendoorn, 2013a). This finding is consistent with results from a systematic literature re-

view, which showed that the generally lower sensitivity of minority parents is more likely to be explained by socioeconomic stressors than by cultural differences (Mesman, Van IJzendoorn, & Bakermans-Kranenburg, 2012). However, the vulnerability of nontraditional immigrant families to experience child maltreatment seems to be independent of socio-economic status or family composition. The increased risk for non-traditional immigrant families may (partly) be explained by parental post-traumatic stress caused by war experiences (Van Ee, Kleber, & Mooren, 2012), in combination with a precarious refugee status.

Finally, we found an increased risk of child maltreatment for stepfamilies. Their vulnerability may be caused by the absence of a biological relationship between the child and the stepparent. According to the parental investment theory, stepparents may be less motivated to care for their stepchildren than a biological parent, because the stepparent chose to live with the partner, but not their partner's offspring (Daly & Wilson, 1994). However, it should be noted that the perpetrator of the abuse or neglect in these stepfamilies was not necessarily the stepparent. Moreover, findings from the NPM-2005 indicated that the adoptive families had a lower risk of child maltreatment compared to the general Dutch population (Van IJzendoorn, Euser, Prinzie, Juffer, & Bakermans-Kranenburg, 2009). The sample of maltreating families in the NPM-2010 consisted of too few adoptive families to test their risk of child maltreatment in the current thesis.

Community risk factors. The next circle in the ecological-transactional model contains factors that are related to the community in which the child lives, such as policy regulations. In the current set of studies, we showed that the use of out-of-home care in the Netherlands increases the risk of child maltreatment. Compared to the general Dutch population, the year prevalence of sexual and physical abuse for non-disabled children based on sentinel reports was significantly higher in residential care settings, whereas in foster care the increased risk was only significant for physical abuse, and not for sexual abuse (Chapters 3 and 4). Moreover, adolescents in residential care reported significantly more physical and sexual abuse than adolescents in foster care, indicating that especially children in residential care settings are at increased risk. In contrast, children with a mild intellectual disability were more vulnerable for sexual victimization in both residential and foster care (physical abuse was not measured in this population; Chapter 5). Whereas a family-based care setting like foster care seems to protect against an elevated risk of sexual abuse for non-disabled children, out-of-home care for children with an intellectual disability leads to an increased risk of sexual abuse irrespective of type of care.

Thus, the use of residential care for non-disabled children and the overall use of out-of-home care for children with an intellectual disability may be considered as important community factors in a child's vulnerability to experience maltreatment. Children in out-of-home care often had negative early caregiving experiences, potentially causing a range of behavioral problems (Zegers, Schuengel, Van IJzendoorn, & Janssens, 2008). Such behavioral problems may even increase in residential care, because of close contact between

high-risk youth (Dishion & Tipsord, 2010; Rhule, 2005). Children in residential care live in relatively large groups of children, often including both boys and girls, and children with the most severe problem behaviors are frequently placed together in the same group (Van IJzendoorn et al., 2011). This may increase the risk of abuse by peers, who were the perpetrator in the majority of cases in the out-of-home care study, especially in residential care. A lack of support, experience, and adequate training of foster parents or group care workers to deal with such challenging behaviors may lead to an increased risk of child maltreatment. Moreover, comparable to stepfamilies, the increased risk in out-of-home care might partly be explained by the absence of a biological relationship between the child and caregiver (Daly & Wilson, 1994). Besides the high victimization rates found for children in out-of-home care, 81% of the group care workers in residential care experienced verbal, physical, or sexual violence by one or more of the youth they worked with (Chapter 6). These findings suggest a general climate of violence in group care settings, which may contribute to the high risk of physical and sexual abuse of children in residential care.

Limitations

Some limitations of the studies presented in the current thesis should be addressed. First, some occupational branches in the NPM-2010 (Chapter 2), and management teams of care facilities in the out-of-home care study (Chapters 3 - 6) were reluctant to participate. Moreover, response rates of sentinels (58%) and adolescents (52%) in the out-of-home care study were only moderate. This may have led to an underestimate if sentinels or abused adolescents (or their legal guardians) felt uncomfortable with reporting about maltreatment experiences, or to an overestimate if sentinels or non-abused adolescents (or their legal guardians) thought it was unnecessary to participate, since they did not have anything to report. Furthermore, we did not have sufficient information to examine parental psychological problems as a risk factor for child maltreatment. It has previously been found that parental problems like anxiety, psychopathology, depression, and alcohol abuse increase the risk of physical abuse and neglect (Stith et al., 2009). Therefore, in order to create a more complete overview of relevant risk factors for child maltreatment more attention should be paid to parental psychopathology in future prevalence studies. Another limitation of the out-of-home care study pertains to the non-random placement of children in either residential or foster care. Based on the current findings, we do not know whether the divergence in year prevalence estimates between residential and foster care is actually caused by the characteristics of the care arrangements or (partly) by pre-existing differences between children before placement. It has been suggested that children who are placed in residential care have more maltreatment experiences and problem behaviors than children in foster care (e.g., Ryan et al., 2008). Although such differences may make children in residential care more vulnerable for child maltreatment, they may not cause or justify the higher year prevalence rates found in residential care compared to foster care.

There are several limitations to the measurement of child maltreatment. First of all, when sentinel and CPS reports are used, a large proportion of cases of child maltreatment

may remain undiscovered (Creighton, 2002). This is especially notable when it comes to children with intellectual disabilities, since these children are more reluctant or unable to disclose their abusive experiences, and it may be more difficult for professionals to recognize signs of maltreatment in this population. Moreover, it may be problematic that in the majority of cases child maltreatment cannot directly and independently be observed, but judgments about the occurrence of maltreatment are based on the observation of its negative effects. These problems may partly be resolved when children report about their own experiences of maltreatment. However, it may be difficult for children to remember the exact timing of abusive events in the past. In addition, the use of self-report questionnaires limits the group of eligible participants. For instance, self-report year prevalence rates presented in the current series of studies only include children between 12 and 17 years of age, because the questionnaire would likely be too challenging for younger children to complete. For similar reasons, findings in the sample of children with an intellectual disability were solely based on reports from sentinels. Because the findings for children with intellectual disabilities are not based on a multimethod approach and thus present a one-sided perspective, conclusions about the differences between residential and foster care for children with an intellectual disability, and the differences between out-of-home care for children with intellectual disabilities and other populations should be drawn with caution.

Implications for research

Each of the single methods used to estimate the year prevalence rates of child maltreatment presented in this thesis has its own advantages and disadvantages, and we found a large discrepancy between year prevalence rates based on the various methods. Overall, year prevalence estimates based on self-reports were considerably higher than estimates based on sentinel and CPS reports, which is consistent with earlier meta-analytic evidence (Stoltenborgh et al., 2011; Stoltenborgh et al., 2013). This implies that prevalence rates based on only one of these measures may not provide a reliable estimation of the actual prevalence. In several countries, prevalence estimates of child maltreatment are solely based on the number of cases reported to CPS. Such estimates are likely an underestimate, since only a small proportion of cases are reported to official authorities. In the current thesis, we found that only 21% of the cases reported by sentinels were reported to CPS agencies (Chapter 2). Triangulation, which involves the use of multiple methods to assess the same phenomenon (Brewer & Hunter, 2006), is an important strength of the current thesis. Although the actual year prevalence of child maltreatment in the Netherlands remains uncertain, the multimethod approach enables us to provide a range of year prevalence estimates. More importantly, comparisons of the various year prevalence estimates and estimates of risk factors converged for the different methods, which makes results about the risk of maltreatment in various populations presented in the current thesis more powerful.

In the current set of studies we tried to unravel the large difference between year prevalence rates based on sentinel and self-report. First, in order to assure consistency in the definition of child maltreatment, coders who coded the sentinel reports in the NPM-2010

also coded the 24 questions about child maltreatment in the self-report questionnaire. They unanimously decided that only 13 of the questions were indicative of child maltreatment, based on the definitions used in the sentinel study. Although the exclusion of items not indicative of maltreatment led to a decrease in the year prevalence rate based on self-report data - from 187 per 1,000 adolescents based on all 24 questions to 99 per 1,000 based on the 13 questions coded as maltreatment - the self-reported year prevalence of child maltreatment is still considerably higher than the year prevalence based on sentinel data.

Second, in the NPM-2010, adolescents participating in the self-report study were selected from the same 28 schools as the sentinels from secondary education. Because these sentinels observed all adolescents who reported about their own maltreatment experiences, we were able to make a direct comparison between sentinel and self-report data. According to sentinels from secondary education, 2,962 adolescents were victim of child maltreatment in 2010 (Alink et al., 2011), whereas self-report data indicated a nearly 33 times higher year prevalence in the same sample: 97,212 victimized adolescents. Concerning sentinels from secondary education, even more cases of maltreatment may remain undiscovered, because teachers only see children during a few hours per week, and always in a group of approximately 30 other children. To further examine the reliability of prevalence estimates, future studies should include reports in the same population from multiple informants (e.g., child, parent, siblings) and at multiple time points.

Because a sensitive topic like child maltreatment may induce the tendency to respond in a socially desirable way, we may wonder to what extent this biased the findings presented in the current thesis. Although we excluded participating adolescents with an outlying value on the social desirability scale in the self-report questionnaires and computer administration of questionnaires may already decrease the likelihood of social desirability, there are other techniques to avoid such bias. The Randomized Response Technique (RRT) is specifically developed to obtain valid answers to sensitive questions and avoid bias related to social desirability (Lensvelt-Mulders, Hox, & Van der Heijden, 2005). In such techniques, participants are convinced that their anonymity is guaranteed, because the meaning of the their answer is hidden by random noise that is added to the data. For instance, with a certain outcome of a randomizer (e.g., dice, cards), participants are forced to answer either ”yes” or ”no” to some sensitive questions. Then, using the probability of forced yes and forced no, the researcher can estimate the probability of admitting maltreatment. Although the use of RRT leads to larger standard errors, it has been shown to be more effective that a direct question-answer design (Lensvelt-Mulders et al., 2005), and may be a valuable technique to reduce bias caused by social desirability in future prevalence studies on child maltreatment.

Another important issue is the definition of child maltreatment that is used in prevalence studies. As we found in the self-report study of the NPM-2010 (Chapter 2), broader definitions yield higher year prevalence rates than narrow definitions (see also Stoltenborgh et al., 2011; Stoltenborgh et al., 2013). Therefore, prevalence rates based on different definitions of child maltreatment cannot directly be compared. Child maltreatment has

been legally defined in 2005 in the Dutch youth care act as "any form of interaction that is violent or threatening towards a minor, whether physical, psychological or sexual in nature, which may be actively or passively imposed upon the minor by a parent or other person with whom the minor has a dependent or constraining relationship, and which causes or is liable to cause serious physical or psychological harm to the minor". Although this definition highlights several important aspects of child maltreatment, such as the active or passive character of maltreatment and the dependency of the minor upon the perpetrator, the definition remains vague about what specific events constitute child maltreatment. Therefore, this legal definition may not be very applicable to operationalize child maltreatment in epidemiological studies. For the studies presented in the current thesis, we adopted the definitions of child maltreatment used in the US National Incidence Studies (NIS; e.g., Sedlak et al., 2010), as was done for the NPM-2005. Based on these more elaborate definitions (see Appendix I), reported cases could be reliably coded as sexual abuse, physical abuse, emotional abuse, physical neglect, emotional/educational neglect or other maltreatment.

Implications for policy and practice

The year prevalence of child maltreatment in the Netherlands was first systematically examined in 2005. Before that, the only available prevalence estimate was based on an extrapolation of the NIS-3 prevalence rate (Sedlak & Broadhurst, 1996) to the Dutch population. The results of the first NPM had huge political impact and received ample publicity in the media, which led to the introduction of child protection professionals and an overall increased awareness for child maltreatment in the Netherlands. With the second Dutch prevalence study presented in the current thesis, we established a periodic monitor of child maltreatment in the Netherlands, enabling cross-time comparisons and examinations of the effect of changing policies on child maltreatment. Results presented in Chapter 2 showed that year prevalence rates based on self-report and sentinel report remained stable from 2005 to 2010, whereas the number of cases reported to CPS increased with 67% over the same 5-year period. Thus, the increased (political) attention for child maltreatment after the publication of the NPM-2005 may have led to better signaling and reporting, but it has not (yet) resulted in a decrease of the actual occurrence of child maltreatment. It remains thus far unclear whether the changing policies and increased awareness will affect the prevalence of child maltreatment on the long term. Subsequent Dutch prevalence studies and international comparisons may shed light on the actual effects of (country-specific) policies on the prevalence of child maltreatment (Ministerie van Volksgezondheid, Welzijn en Sport en Ministerie van Veiligheid en Justitie, 2012).

The findings presented in the current thesis about year prevalence rates and vulnerability of various populations may be considered as an empirical foundation for future policy aimed at the prevention of child maltreatment. First of all, the use of residential care and the use of out-of-home care in general for children with an intellectual disability seem to be the largest risk factors for child maltreatment (see Figure 3). Given the alarming year prevalence rates of sexual and physical abuse in residential care, and the large number of

peer offenders, we should reconsider the use of residential care for treatment of vulnerable children with previous maltreatment experiences. Instead, residential care should only be used as a last resort, with single-sex residential groups and smaller child-to-caregiver ratios, in order to enable adequate supervision of group interactions (Dozier et al., 2013). Furthermore, the high year prevalence of staff victimization in residential care settings indicates a general climate of violence in residential care settings. Interestingly, this increased level of violence was not found in juvenile detention centers, suggesting that strict rules and regulations are important in the prevention of maltreatment in group care settings. Although findings in the current thesis indicate that children in residential care have an increased risk for child maltreatment compared to children growing up in foster families, foster care is not free of child maltreatment either, especially foster care for children with a mild intellectual disability. Therefore, caregivers in residential care as well as foster parents should receive more training and support to deal with difficult, vulnerable children, in order to reduce the abuse of children in out-of-home care.

Second, the familial risk factors found in the NPM-2010 may be informative for the prevention of child maltreatment in families. According to findings from the current thesis, a low SES is the most important familial risk factor for child maltreatment (Figure 3). Thus, policy aimed at enhancing employment rates and at creating opportunities for continued education for parents may reduce the prevalence of child maltreatment. The latter may be especially valuable for traditional immigrant parents, since their risk of child maltreatment disappears when the effects of low education were controlled for. Moreover, parent support programs should specifically target families that are the most vulnerable. Single parent families, (non-traditional) immigrant families, stepfamilies, and families with three or more children may experience more daily parenting stress, leading to a higher risk of child maltreatment. An evidence-based preventive intervention program, such as the Video-feedback to promote Positive Parenting and Sensitive Discipline (VIPP-SD; Juffer, Bakermans-Kranenburg, & Van IJzendoorn, 2008) may decrease the risk of child maltreatment for these vulnerable families. At the same time, it is important to note that prevention efforts should not solely be focused on the populations identified as vulnerable in the current thesis. Although the risk of child maltreatment is higher among these groups, and especially among families with a combination of multiple risk factors, they constitute only a very small proportion of all maltreating families. If prevention and intervention programs would only focus on this specific high-risk group, the majority of maltreated children remains invisible and victimized (Alink, 2013).

Conclusion

The main aim of the current thesis was to examine the year prevalence of various forms of child maltreatment in the general Dutch population and in Dutch out-of-home care. Based on reports from professionals from diverse occupational branches and to CPS agencies, 33.8 per 1,000 children between 0-17 years old were victim of child maltreatment in the

Netherlands in 2010. Based on self-reports, 99.4 per 1,000 adolescents from 12-17 years old experienced child maltreatment in the same year.

The current thesis also sheds light on the vulnerability to experiencing child maltreatment in different populations. Besides the vulnerability of children with low intellectual abilities and a higher risk of sexual abuse for girls, our findings identified several types of families that are more vulnerable to child maltreatment, such as low educated families, unemployed families, single parent families, immigrant families, and families with three or more children. However, the highest risks were found for children in out-of-home care. Non-disabled children in residential care have a higher risk of sexual and physical abuse, and children in out-of-home care for children with intellectual disabilities were at increased risk of sexual abuse, irrespective of care arrangement. We hope that the year prevalence rates and risk factors presented in this thesis will contribute to programs increasing safety for such vulnerable children in their home or other care settings.