

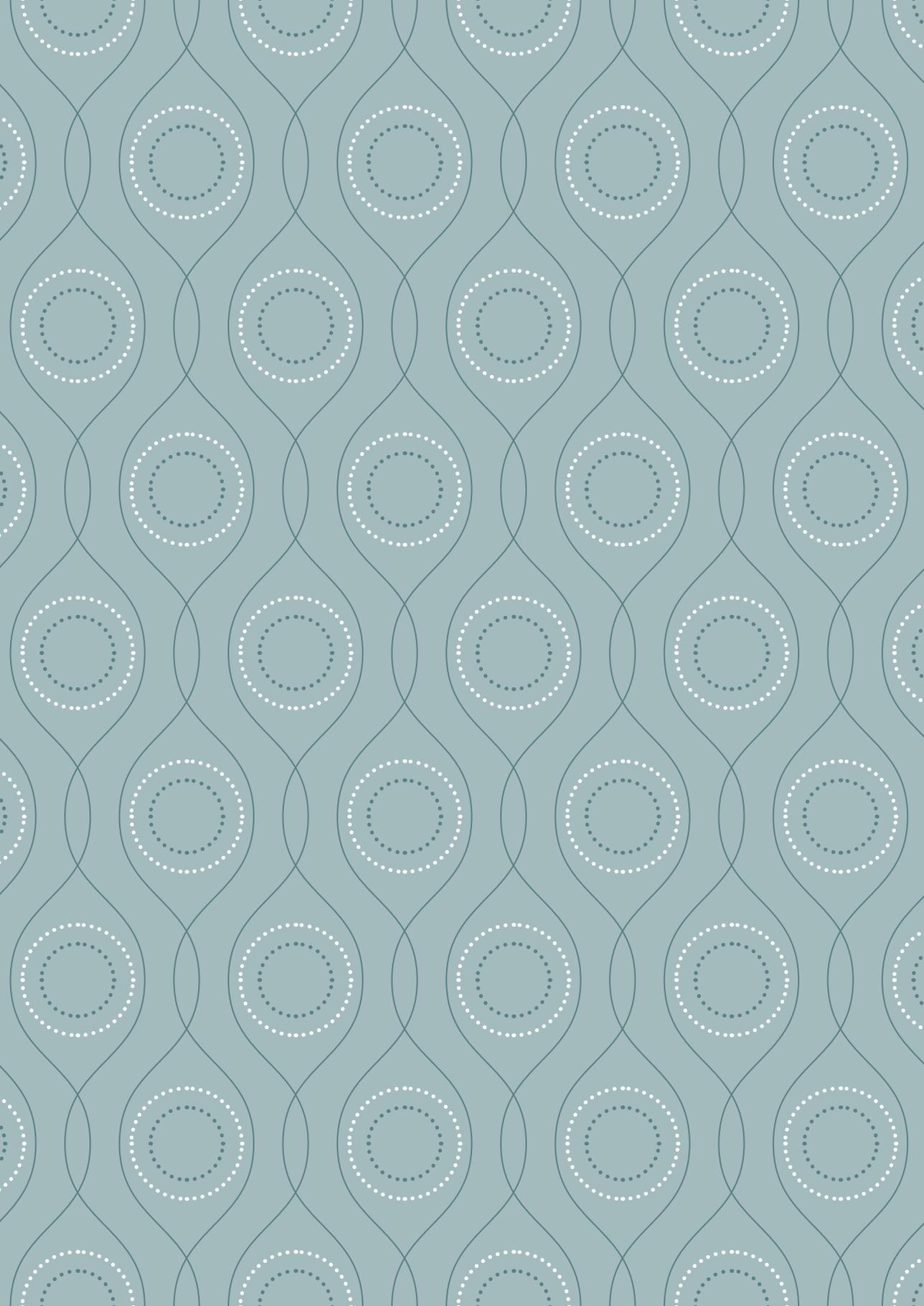
PDF hosted at the Radboud Repository of the Radboud University Nijmegen

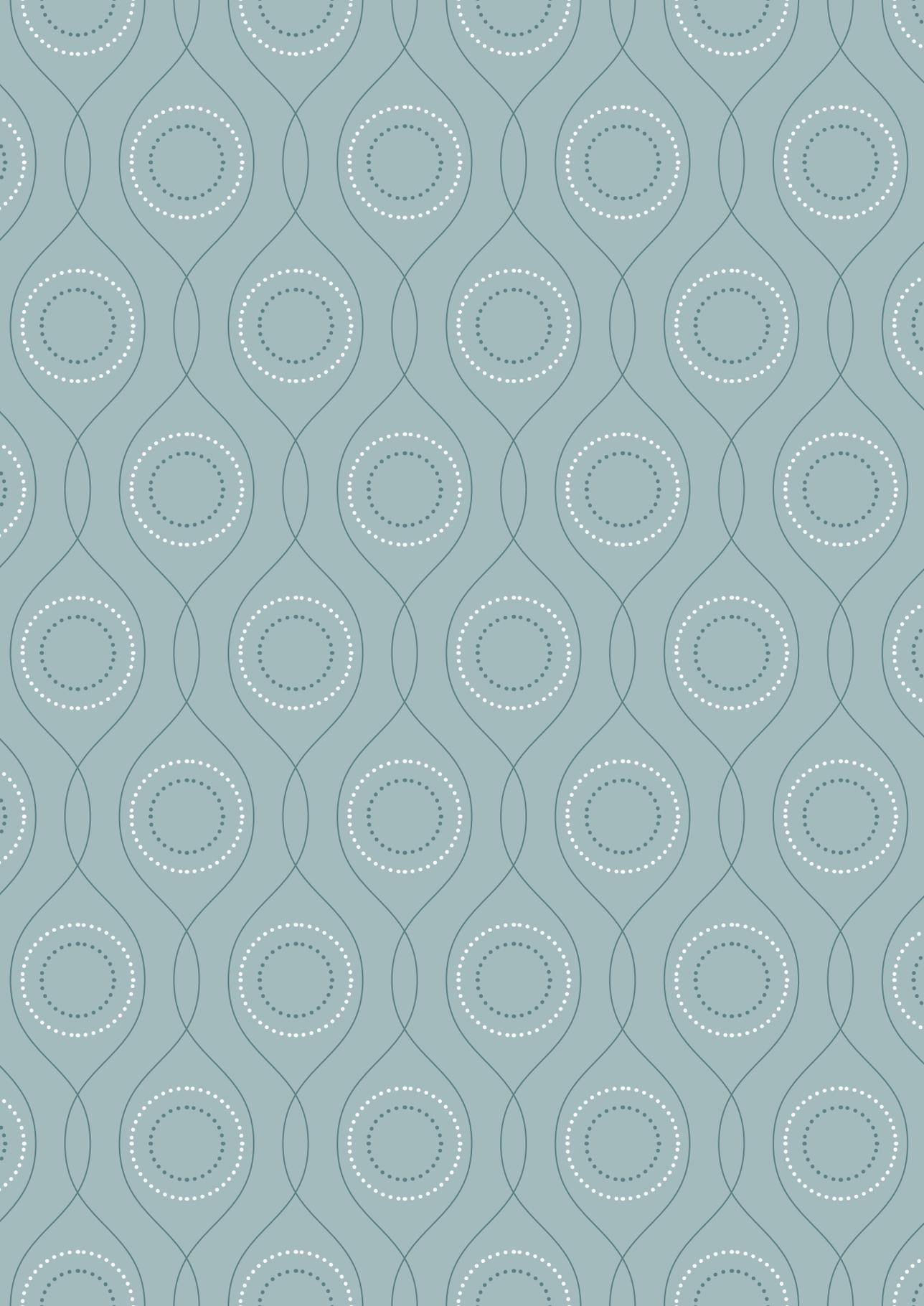
The following full text is a publisher's version.

For additional information about this publication click this link.

<http://hdl.handle.net/2066/178911>

Please be advised that this information was generated on 2019-07-22 and may be subject to change.





MENTOR MOTHERS IN FAMILY PRACTICE

The implementation of a low threshold intervention
for abused mothers and their children

Maartje Johanna Wilhelmina Loeffen

This study was granted by the municipality of Nijmegen (the Netherlands) and ZonMw (the Netherlands).

This study has been prepared by the Department of Primary and Community Care of the Radboudumc, Nijmegen, the Netherlands.

Cover: Sanne van den Berg

Layout: Sanne van den Berg

Print: Ipskamp Printing

ISBN: 978-94-028-0863-6

Copyright 2017, M.J.W. Loeffen

No part of this work may be reproduced in any form, by print, photo print, microfilm or otherwise, without prior written permission of the author.

Niets uit deze uitgave mag worden vermeningvuldigd en /of openbaar gemaakt door middel van druk, fotokopie, microfilm of welke andere wijze dan ook, zonder uitdrukkelijke schriftelijke toestemming van de auteur.

MENTOR MOTHERS IN FAMILY PRACTICE

The implementation of a low threshold intervention
for abused mothers and their children

Proefschrift

ter verkrijging van de graad van doctor

aan de Radboud Universiteit Nijmegen

op gezag van rector magnificus prof.dr. J.H.J.M. van Krieken,

volgens besluit van het college van decanen

In het openbaar te verdedigen op

woensdag 20 december 2017

om 16.30 uur precies

door

Maartje Johanna Wilhelmina Loeffen

geboren op 20 december 1980

te Ravenstein

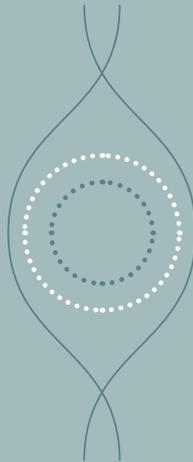
Promotoren	Mw. prof. dr. A.L.M. Lagro-Janssen Dhr. prof. dr. F.P.J. Wester
Copromotoren	Mw. dr. S.H. Lo Fo Wong Mw. dr. M.G.H. Laurant
Manuscriptcommissie	Dhr. prof.dr. R.J. van der Gaag Dhr. prof. dr. G.J.M. Hutschemaekers Dhr. prof. dr. J.F.M. Metsemakers (Universiteit Maastricht)

TABLE OF CONTENTS

CHAPTER 1	General introduction	9
CHAPTER 2	Are gynaecological and pregnancy-associated conditions in family practice indicators of intimate partner violence? <i>Family Practice 2016; 33(4):354-9</i>	21
CHAPTER 3	Facilitators and barriers of implementation of paraprofessional support for abused women in primary care: a mixed methods study. <i>Submitted</i>	39
CHAPTER 4	Implementing mentor mothers in family practice to support abused mothers: study protocol. <i>BMC Family practice 2011; 12 (113)</i>	63
CHAPTER 5	Mentor mother support for mothers experiencing intimate partner violence in family practice: A qualitative study of three different perspectives on the facilitators and barriers of implementation. <i>European Journal of General Practice 2017; 23(1):27-34</i>	79
CHAPTER 6	Process evaluation: an appropriate method to measure the effect of mentor mother support for abused mothers. <i>Submitted</i>	97
CHAPTER 7	General discussion	117
CHAPTER 8	Summary / Samenvatting	133
CHAPTER 9	Dankwoord	145
CHAPTER 10	Curriculum vitae	151

CHAPTER 1

GENERAL INTRODUCTION



Intimate partner violence (IPV) is highly prevalent worldwide and has negative consequences for the physical and mental health of women and their children. (1-4) Along with these negative health sequels, it is widely acknowledged that violence is transmitted to the next generation. Children growing up in violent homes are, one out of three, future victims or perpetrators of IPV. (5-10) To stop the violence and diminish these harmful consequences, effective IPV interventions need to be developed. Mentor mother support, a low threshold intervention in family practice for mothers who are victims of IPV, proved to be effective in earlier studies. (11, 12) It was developed in Melbourne, Australia, and translated to the Dutch situation in Rotterdam. In 2011 we also implemented mentor mother support in Nijmegen, the Netherlands. In this thesis we aim to find conditions to successfully implement mentor mother support in family practice by studying the facilitators and barriers of successful implementation.

In this general introduction we start with defining IPV, followed by a discussion of its prevalence, the consequences it has for abused women and their child(ren), and the problems healthcare providers encounter with the identification of IPV. In line with these discussions, the main objective of the study, implementation of mentor mother support in family practice, and the corresponding research objectives will next be introduced. At the end of this introduction an outline of the thesis will be given which in summary describes objective, design and outcomes of the studies presented in the successive chapters of the thesis.

DEFINITION AND PREVALENCE OF IPV

Definitions of IPV range from physical abuse in current relationships to inclusion of emotional and sexual abuse in past relationships. (13) In this thesis we define IPV as any behavioral conduct within an intimate relationship that causes physical, sexual or psychological harm, including acts of physical aggression, sexual coercion, psychological abuse and controlling behaviors. This definition covers violence by both current and former spouses and partners. (1)

Prevalence studies on IPV use different definitions and methodologies to measure IPV, which as a consequence leads to different prevalence rates. Despite these differences, they all show that IPV is highly prevalent worldwide. (1, 14-16) The World Health Organization performed a multi-country study to measure domestic violence in the general population and found that between 15 and 71 percent of women had ever experienced physical and/or sexual partner violence in their lives. (17) A prevalence study in the general population in the Netherlands, which used quantitative and qualitative methods to measure physical and sexual abuse, found a lifetime prevalence of 21 percent. (18) Besides prevalence studies

in the general population, national studies performed in family practice showed a lifetime prevalence of IPV between 30-45 percent. (19-24)

HEALTH CONSEQUENCES

IPV has negative consequences for the physical and mental health of abused women. Several studies investigated that female victims of IPV experience more physical problems like injury, chronic pain, gastrointestinal and gynaecological symptoms. (25-27) They also suffer more from mental health problems like depression, posttraumatic stress disorder and substance abuse compared to non-abused women. (23, 28-30) The children, who often witness the abuse of their mother, also have an increased risk to develop emotional and behavioral problems. (3, 4, 10, 31) Furthermore, they are more likely to become victims or perpetrators later in life, which is defined as intergenerational transmission. (5-10) Together these results show that witnessing IPV is harmful for children and therefore considered as child abuse. The negative health consequences for mother and child(ren) consequently lead to a higher healthcare consumption. Abused women visit their family physicians almost twice as often compared to non-abused women. (32-34)

IDENTIFICATION

The negative health consequences necessitate early detection of IPV to stop the violence and diminish these negative outcomes. Family physicians are often the first one women will turn to for help and therefore they can play an important role in the identification of IPV. (35) They often have a long relationship of trust with their patients which may enable them to recognize symptom patterns and to start discussing IPV. However, family physicians often do not recognize the hidden symptoms of IPV and most abused women find it very hard to disclose the violence. (36-38). For family physicians important barriers to recognize and discuss abuse are lack of competence and confidence to identify IPV and subsequently to manage the consequences of disclosure. On the other side, fear of the consequences and shame hinder women to disclose the abuse. (39) The study of Hegarty et al. (2001) showed that women who disclosed the abuse were more than twice as likely to have been actively asked about abuse by the family physician. (38) It emphasizes the important role of the family physician to recognize IPV and offer adequate treatment, despite its difficulty as specific indicators of IPV are (often) lacking. To improve recognition of IPV by family physicians, it would be helpful to determine health problems as indicators for IPV. Furthermore a training for family physicians focused on recognition and discussion of violence, developed by Lo Fo Wong, proved to be effective. (40) Awareness and identification

of abuse improved and active questioning increased among family physicians who received the training.

MENTOR MOTHERS FOR SUPPORT AND ADVISE (MEMOSA)

After identification of IPV by family physicians, it is important to have a low threshold intervention to offer. A communicative approach with empathy and empowering is valued most by these women. (35) Women in violent relationships often have normalized the abuse situation and are in doubt whether someone will be able to help. (37, 38, 41) Women's readiness for change will be leading in the low threshold intervention. Therefore it is essential to take into account a woman's stage of change that is based on the Transtheoretical Model of Health Behavior Change that consists of five stages. (41, 42) For IPV this means in the stage of pre contemplation, that a woman is not aware of, or minimizes the problem of abuse. In the stage of contemplation, she acknowledges the problem and considers possible changes, followed by making plans in the preparation stage. In the stage of action, she follows through with plans and in the last stage, the stage of maintenance, she keeps the new actions as part of her daily activity. An adequate approach of the family physician depends on the stage of change female victims of IPV find themselves in. For instance in the stage of pre contemplation, when a woman is not aware of being a victim of IPV, the healthcare provider first needs to validate her experiences and reinforce that IPV is unacceptable, before interventions are offered. Whereas in the stage of action interventions and strategies need to be evaluated. Support will not be accepted if an abused woman is unaware of the abnormality of abuse or not ready for acceptance of help. (41)

However, to increase acceptance of help a promising intervention to support abused women with children has been developed and studied. This intervention is called mentor mother support. Mentor mother support, originally developed in Melbourne (Australia), offers personalized support in centers for mother and child care, taking into account a woman's stage of change. Besides, the intervention is based on the fact that social support is associated with good physical and mental health outcomes for women. (43) It can improve the acceptance of professional help by mother and child and results in an improvement of important clinical outcomes as reduction of violence and improvement of general well-being. (11)

The mentor mother support intervention has been modified to the Dutch situation and offered in family practice. It consists of one hour weekly visit by a mentor mother during 4 months. The mentor mothers provide non-judgmental listening and support, develop a trusting relationship and empower abused women. Mentor mothers are paraprofessionals,

non-professionals who received ten days of training in which they learned how to support abused mothers. The support offers abused mothers tools to reduce the violence, helps them to cope with depressive symptoms and expand their social support, makes them aware of the effects of IPV on their child(ren) and helps them to accept professional help for themselves and their children. Visits take place at home, at the family practice, or any other place where the mother feels safe and at ease. Feasibility and effectiveness of this intervention has been studied in Rotterdam, the Netherlands (Mentor Mothers for Support and Advise 2007-2010) and the results showed a decrease in violence and in mental health problems, an increase in acceptance of professional help for mother and child, and social support and activities. (12) Based on these positive outcomes, we decided to set up this promising intervention in Nijmegen, the Netherlands, evaluate its outcomes, the implementation of this intervention, and monitor the process the abused women go through during mentor mother support.

IMPLEMENTATION

The main findings of the MeMoSA Rotterdam study make mentor mother support a promising intervention to be implemented in family practice. Although our MeMoSA Rotterdam study showed that mentor mother support is an effective intervention, it will not necessarily lead to successful implementation in family practice. Implementation research shows that translating evidence into practice is challenging. (44) Grol et al. (2006) also acknowledge that an effective intervention will not always lead to successful implementation in daily practice. (45) They describe several facilitators and barriers of implementation, like an individual's intention to change his/her behavior, professional development, organizational communication processes and law and regulations conditions. In order to successfully implement an effective intervention, these factors need to be investigated by, for instance, organizing interviews and focus groups with professionals and patients. To describe the implementation strategy and the participants' experiences with the process, and to check if the intended implementation strategy was applied, it is useful to conduct a process evaluation.

Therefore we aimed to conduct an implementation study that includes a process evaluation and investigates the facilitators and barriers of implementation of mentor mother support in family practice.

OBJECTIVES OF THIS THESIS

This project is set up to find conditions for successful implementation of mentor mother support in family practice. As family physicians often fail to recognize IPV, poor identification of abuse can be considered as a barrier for implementing mentor mother support in family practice. To be able to improve identification, we first aim to examine which health problems in family practice can be seen as indicators for IPV. Secondly, we aim to discover other facilitators and barriers of successfully implementing mentor mother support in family practice. Finally, we evaluate the effect of mentor mother support as it is now implemented in a different region in the Netherlands. Besides a quantitative analysis on standardized outcomes, we will conduct a qualitative process evaluation to evaluate the effect of mentor mother support. This thesis therefore will address the following objectives:

- 1) Examine if gynaecological and pregnancy-associated conditions in family practice are indicators for IPV.
- 2) Investigate which factors facilitate or hinder the implementation of mentor mother support in family practice.
- 3) Evaluate the effect of implementing mentor mother support in family practice by mixed methods, combining a quantitative study with standardized outcomes with a process evaluation with personalized outcomes.

OUTLINE OF THE THESIS

The main body of this thesis consists of 5 articles that stand on their own. Each article contains an introduction, a methods, a results and a discussion section, as a result of which a certain degree of repetition is inevitable. The content of the seven chapters of the thesis will be described in summary below:

- Chapter 1** provides a general introduction to the thesis.
- Chapter 2** describes a cross sectional waiting room survey that focused on the association between IPV and gynaecological and pregnancy-associated conditions in family practice. Questionnaires were used to measure the presence of IPV and gynaecological and pregnancy-associated conditions.
- Chapter 3** describes a mixed methods study combining a literature study with semi-structured interviews. The factors that facilitate or hinder implementation of paraprofessional support for female victims of IPV in primary care are described.
- Chapter 4** provides the study protocol of the studies in chapter 5 and 6.

- Chapter 5** describes a qualitative study that focused on the implementation of mentor mother support in family practice. Participating family physicians and abused mothers were interviewed and a focus group for the mentor mothers was organized to investigate the facilitators and barriers of successful implementation from three different perspectives.
- Chapter 6** describes a mixed methods study combining quantitative pre- and posttests using standardized questionnaires with a qualitative process evaluation. The aim is to evaluate the effect of mentor mother support and to investigate which method is most appropriate to measure the effect of this IPV intervention.
- Chapter 7** contains the general discussion which describes the main findings and meaning of the outcomes of this thesis. The methodological limitations are discussed and clinical implications and recommendations for education and further research are offered.

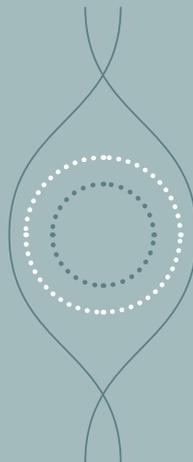
REFERENCES

1. Watts C, Zimmerman C. Violence against women: global scope and magnitude. *Lancet*. 2002;359(9313):1232-7.
2. Vos T, Astbury J, Piers LS, Magnus A, Heenan M, Stanley L, et al. Measuring the impact of intimate partner violence on the health of women in Victoria, Australia. *Bulletin of the World Health Organization*. 2006;84(9):739-44.
3. Holt S, Buckley H, Whelan S. The impact of exposure to domestic violence on children and young people: a review of the literature. *Child abuse & neglect*. 2008;32(8):797-810.
4. Levendosky AA, Bogat GA, Martinez-Torteya C. PTSD symptoms in young children exposed to intimate partner violence. *Violence Against Women*. 2013;19(2):187-201.
5. Widom CS. Childhood Victimization: Early Adversity, Later Psychopathology. *National Institute of Justice Journal*. 2000;242:3-9.
6. Cannon EA, Bonomi AE, Anderson ML, Rivara FP. The intergenerational transmission of witnessing intimate partner violence. *Archives of pediatrics & adolescent medicine*. 2009;163(8):706-8.
7. Ehrensaft MK, Cohen P, Brown J, Smailes E, Chen H, Johnson JG. Intergenerational transmission of partner violence: a 20-year prospective study. *Journal of consulting and clinical psychology*. 2003;71(4):741-53.
8. Ernst AA, Weiss SJ, Hall J, Clark R, Coffman B, Goldstein L, et al. Adult intimate partner violence perpetrators are significantly more likely to have witnessed intimate partner violence as a child than nonperpetrators. *The American journal of emergency medicine*. 2009;27(6):641-50.
9. Glasser M, Kolvin I, Campbell D, Glasser A, Leitch I, Farrelly S. Cycle of child sexual abuse: links between being a victim and becoming a perpetrator. *The British journal of psychiatry : the journal of mental science*. 2001;179:482-94; discussion 95-7.
10. Kitzmann KM, Gaylord NK, Holt AR, Kenny ED. Child witnesses to domestic violence: a meta-analytic review. *Journal of consulting and clinical psychology*. 2003;71(2):339-52.
11. Taft AJ, Small R, Hegarty KL, Watson LF, Gold L, Lumley JA. Mothers' AdvocateS In the Community (MOSAIC)--non-professional mentor support to reduce intimate partner violence and depression in mothers: a cluster randomised trial in primary care. *BMC public health*. 2011;11:178.
12. Prozman GJ, Lo Fo Wong SH, Lagro-Janssen AL. Support by trained mentor mothers for abused women: a promising intervention in primary care. *Family practice*. 2014;31(1):71-80.
13. Hegarty K, Roberts G. How common is domestic violence against women? The definition of partner abuse in prevalence studies. *Australian and New Zealand journal of public health*. 1998;22(1):49-54.
14. Devries KM, Mak JY, Garcia-Moreno C, Petzold M, Child JC, Falder G, et al. Global health. The global prevalence of intimate partner violence against women. *Science (New York, NY)*. 2013;340(6140):1527-8.
15. Hien D, Ruglass L. Interpersonal partner violence and women in the United States: an overview of prevalence rates, psychiatric correlates and consequences and barriers to help seeking. *International journal of law and psychiatry*. 2009;32(1):48-55.
16. Hagemann-White C. European Research on the Prevalence of Violence Against Women. *Violence Against Women*. 2001;7.

17. Garcia-Moreno C, Jansen HA, Ellsberg M, Heise L, Watts CH, Health WHOM-cSoWs, et al. Prevalence of intimate partner violence: findings from the WHO multi-country study on women's health and domestic violence. *Lancet*. 2006;368(9543):1260-9.
18. Römken R. Prevalence of Wife Abuse in the Netherlands: Combining Quantitative and Qualitative Methods in Survey Research. *Journal of interpersonal violence*. 1997;12.
19. Richardson J, Coid J, Petruckevitch A, Chung WS, Moorey S, Feder G. Identifying domestic violence: cross sectional study in primary care. *BMJ (Clinical research ed)*. 2002;324(7332):274.
20. Bradley F, Smith M, Long J, O'Dowd T. Reported frequency of domestic violence: cross sectional survey of women attending general practice. *BMJ (Clinical research ed)*. 2002;324(7332):271.
21. Hegarty KL, Bush R. Prevalence and associations of partner abuse in women attending general practice: a cross-sectional survey. *Australian and New Zealand journal of public health*. 2002;26(5):437-42.
22. Lokhmatkina NV, Kuznetsova OY, Feder GS. Prevalence and associations of partner abuse in women attending Russian general practice. *Family practice*. 2010;27(6):625-31.
23. Prosman GJ, Jansen SJ, Lo Fo Wong SH, Lagro-Janssen AL. Prevalence of intimate partner violence among migrant and native women attending general practice and the association between intimate partner violence and depression. *Family practice*. 2011;28(3):267-71.
24. Elliott BA, Johnson MM. Domestic violence in a primary care setting. Patterns and prevalence. *Archives of family medicine*. 1995;4(2):113-9.
25. Campbell J, Jones AS, Dienemann J, Kub J, Schollenberger J, O'Campo P, et al. Intimate partner violence and physical health consequences. *Archives of internal medicine*. 2002;162(10):1157-63.
26. Ellsberg M, Jansen HA, Heise L, Watts CH, Garcia-Moreno C, Health WHOM-cSoWs, et al. Intimate partner violence and women's physical and mental health in the WHO multi-country study on women's health and domestic violence: an observational study. *Lancet*. 2008;371(9619):1165-72.
27. Coker AL, Smith PH, Bethea L, King MR, McKeown RE. Physical health consequences of physical and psychological intimate partner violence. *Archives of family medicine*. 2000;9(5):451-7.
28. Hegarty K, Gunn J, Chondros P, Small R. Association between depression and abuse by partners of women attending general practice: descriptive, cross sectional survey. *BMJ (Clinical research ed)*. 2004;328(7440):621-4.
29. Lagdon S, Armour C, Stringer M. Adult experience of mental health outcomes as a result of intimate partner violence victimisation: a systematic review. *European journal of psychotraumatology*. 2014;5.
30. Nathanson AM, Shorey RC, Tirone V, Rhatigan DL. The Prevalence of Mental Health Disorders in a Community Sample of Female Victims of Intimate Partner Violence. *Partner abuse*. 2012;3(1):59-75.
31. Russell D, Springer KW, Greenfield EA. Witnessing domestic abuse in childhood as an independent risk factor for depressive symptoms in young adulthood. *Child abuse & neglect*. 2010;34(6):448-53.
32. Lo Fo Wong S, Wester F, Mol S, Romkens R, Lagro-Janssen T. Utilisation of health care by women who have suffered abuse: a descriptive study on medical records in family

- practice. *The British journal of general practice : the journal of the Royal College of General Practitioners*. 2007;57(538):396-400.
33. Prozman GJ, Lo Fo Wong SH, Bulte E, Lagro-Janssen AL. Healthcare utilization by abused women: a case control study. *The European journal of general practice*. 2012;18(2):107-13.
 34. Bonomi AE, Anderson ML, Rivara FP, Thompson RS. Health care utilization and costs associated with physical and nonphysical-only intimate partner violence. *Health services research*. 2009;44(3):1052-67.
 35. Lo Fo Wong S, Wester F, Mol S, Romkens R, Hezemans D, Lagro-Janssen T. Talking matters: abused women's views on disclosure of partner abuse to the family doctor and its role in handling the abuse situation. *Patient education and counseling*. 2008;70(3):386-94.
 36. Ramsay J, Richardson J, Carter YH, Davidson LL, Feder G. Should health professionals screen women for domestic violence? Systematic review. *BMJ (Clinical research ed)*. 2002;325(7359):314.
 37. Prozman GJ, Lo Fo Wong SH, Lagro-Janssen AL. Why abused women do not seek professional help: a qualitative study. *Scandinavian journal of caring sciences*. 2014;28(1):3-11.
 38. Hegarty KL, Taft AJ. Overcoming the barriers to disclosure and inquiry of partner abuse for women attending general practice. *Australian and New Zealand journal of public health*. 2001;25(5):433-7.
 39. Rose D, Trevillion K, Woodall A, Morgan C, Feder G, Howard L. Barriers and facilitators of disclosures of domestic violence by mental health service users: qualitative study. *The British journal of psychiatry : the journal of mental science*. 2011;198(3):189-94.
 40. Lo Fo Wong S, Wester F, Mol SS, Lagro-Janssen TL. Increased awareness of intimate partner abuse after training: a randomised controlled trial. *The British journal of general practice : the journal of the Royal College of General Practitioners*. 2006;56(525):249-57.
 41. Reisenhofer S, Taft A. Women's journey to safety - the Transtheoretical model in clinical practice when working with women experiencing Intimate Partner Violence: a scientific review and clinical guidance. *Patient education and counseling*. 2013;93(3):536-48.
 42. Frasier PY, Slatt L, Kowlowitz V, Glowa PT. Using the stages of change model to counsel victims of intimate partner violence. *Patient education and counseling*. 2001;43(2):211-7.
 43. Coker AL, Smith PH, Thompson MP, McKeown RE, Bethea L, Davis KE. Social support protects against the negative effects of partner violence on mental health. *Journal of women's health & gender-based medicine*. 2002;11(5):465-76.
 44. Rabin BA, Brownson RC, Haire-Joshu D, Kreuter MW, Weaver NL. A glossary for dissemination and implementation research in health. *Journal of public health management and practice : JPHMP*. 2008;14(2):117-23.
 45. Grol R, Wensing, M. Implementatie: effectieve verbetering van patiëntenzorg [Implementation: effective improvement of patientcare]. Maarssen: Elsevier gezondheidszorg; 2006.

CHAPTER 2
ARE GYNAECOLOGICAL
AND PREGNANCY-ASSOCIATED
CONDITIONS IN FAMILY PRACTICE
INDICATORS OF INTIMATE
PARTNER VIOLENCE?



Maartje Loeffen
Sylvie Lo Fo Wong
Fred Wester
Miranda Laurant
Antoine Lagro-Janssen

Family Practice 2016;
33(4):354-9

ABSTRACT

BACKGROUND Some gynaecological and pregnancy-associated conditions are more common in abused women than in non-abused women, but this has not been examined in family practice.

OBJECTIVE We aimed to investigate intimate partner violence (IPV) prevalence in family practice and to investigate whether gynaecological and pregnancy-associated conditions are more common in abused women than in non-abused women.

METHODS We conducted a cross-sectional waiting room survey in 12 family practices in the Netherlands in 2012. Women were eligible if they were 18 years or older. Questionnaires measured IPV and gynaecological and pregnancy-associated conditions. Chi-square tests were used to assess the differences in gynaecological and pregnancy-associated conditions between abused women and non-abused women.

RESULTS The response rate was 86% (262 of 306 women). The past-year prevalence of IPV in women who had had an intimate relationship in the past year and were not accompanied by their partner was 8.7% (n = 195). Lifetime prevalence of women who had ever had an intimate relationship, but not in the past year, was 17.6% (n = 51). Sexually transmitted infections (STIs) [odds ratio (OR) = 4.6, 95% confidence interval (CI) = 1.7–12.5, n = 240], menstrual disorders (OR = 3.7, 95% CI = 1.2–11.2, n = 143), sexual problems (OR = 3.3, 95% CI = 1.2–9.3, n = 229), miscarriages (OR = 2.5, 95% CI = 1.062–5.8, n = 202) and induced abortions (OR = 2.7, 95% CI = 1.028–7.3, n = 202) were significantly more common in abused women than in non-abused women.

CONCLUSION Family physicians should ask about IPV when women present with STIs, menstrual disorders, sexual problems, miscarriages or induced abortions. To improve the recognition of IPV, future research needs to investigate whether a combination of symptoms offers improved prediction of IPV.

KEY WORDS Intimate partner violence, obstetrics/post-partum care, primary care, reproductive health/family planning/contraception, sexual health, women's health/gynaecology.

INTRODUCTION

Intimate partner violence (IPV) is a highly prevalent problem worldwide and is associated with physical and mental health problems (1). These harmful effects should be acknowledged and prevented by early identification of partner abuse. Early intervention may help to deal with these health problems.

Family physicians are often the first persons to be visited, and they, therefore, are in a position to identify and guide abused women to appropriate support at an early stage. Prevalence studies in family practice indicated a lifetime prevalence of IPV between 30% and 41% (2–4) among women visiting their family physicians. Abused women have almost double consultation rates compared with non-abused women (5). Nevertheless, family physicians often neither identify nor discuss IPV with patients, leading to severe under-recognition of IPV between 0% and 3% (6).

Abused women find it hard to seek professional help. Fear of their partner or unawareness of the impact of abuse on themselves and their children is a major barrier (7). Family physicians, similarly, are often not aware, lack time and training and feel uncomfortable discussing abuse (8).

One way to improve recognition of IPV is to establish what red flags or hidden signs abused women present with when they visit their family physician. Previous research in different health care settings already demonstrated that abused women experience more mental health problems, such as depression, post-traumatic stress disorder and anxiety (9), or physical problems, such as headaches, chronic neck pain, digestive problems, urinary tract infection and gynaecological problems (10).

A cross-sectional study by John et al. (11) in a gynaecological setting found that significantly more abused women than non-abused women complain of gynaecological problems such as lower abdominal pain, dysmenorrhoea and dyspareunia. Other studies in gynaecological settings indicate that abused women have a higher risk of sexually transmitted infections (STIs), abortion and unintended pregnancy than non-abused women (12–15).

IPV often continues even in pregnancy. A study in 19 countries found that between 2% and 13.5% of pregnant women were abused by their partners (16). Abuse during pregnancy is associated with adverse maternal and foetal outcomes such as vaginal bleeding, miscarriage, prematurity, low birth weight and stillbirth (17).

Until now, there has been a lack of studies on these associations in the family practice setting. To improve the recognition of IPV by family physicians, therefore, this study investigates the prevalence of IPV, whether the prevalence of gynaecological and pregnancy-associated conditions differs between abused and non-abused women

attending family practice and whether this difference can serve as a risk indicator. We expect gynaecological and pregnancy-associated conditions to be more common in abused women than in non-abused women.

METHODS

STUDY DESIGN

We conducted a cross-sectional waiting room survey in family practices in the eastern part of the Netherlands, from January to June 2012.

PARTICIPANTS

We invited 15 of the 33 family practices that also participated in our MeMoSA Nijmegen study (18), which focused on the implementation of a low threshold intervention (mentor mother support) for mothers who were victims of IPV. The family practices were located in Nijmegen, a town in the east of the Netherlands, and its vicinity. To represent the local context, we selected family practices that differed in their populations (urban/rural). Twelve of the 15 invited family practices consented to participate (80%). All female patients of 18 years or older who made an appointment to visit their family physician were asked to participate in our study. For safety reasons, only women who were not accompanied by their partner were invited to complete the waiting room survey.

PROCEDURE

The medical assistant of the family practice invited all eligible women by phone at the time when these women made an appointment. Women were told that the study was about experiences in intimate relationships and about female or gynaecological problems. Women were asked to arrive 15 minutes in advance of their appointment to complete the questionnaire, which would take 10 minutes. Women who refused to participate were asked to fill in a form with their age and to indicate their reason for refusal. Participants also filled in an informed consent form. A research assistant was available in a private room to answer questions or assist those women who had language problems. No incentives were given to participating women or practices.

MEASURES

Data were collected with a questionnaire consisting of socio-demographic data, the validated Composite Abuse Scale (CAS) (19) and questions about gynaecological and pregnancy-associated conditions. The socio-demographic variable of education was divided into three levels: low (no school, primary school or lower secondary vocational

education), middle (higher general secondary education, pre-university secondary education or intermediate vocational education) and high education level (higher vocational or university education).

IPV was measured by the validated CAS (19) that contains 30 items scaled by frequency (0 = never to 5 = daily). The CAS has been validated in a clinical setting to measure the presence, severity and type of IPV, with an internal reliability > 0.85 (19). For our analysis, we used a cut-off score of 7, meaning that we defined a woman as being a victim of IPV if we measured a total score of 7 or above. A cut-off score of 3 is also used sometimes, but we chose a cut-off score of 7 to prevent false positives. The CAS distinguishes three groups of women: (i) women with an intimate relationship in the past year, (ii) women who ever had an intimate relationship in the past but did not have an intimate relationship in the past year and (iii) women who never had an intimate relationship. For women with an intimate relationship in the past year, the CAS measures the prevalence of IPV in the past 12 months. Lifetime prevalence is measured for women who ever had an intimate relationship in the past but not in the past year.

Gynaecological conditions mentioned in the questionnaire were as follows: STIs, lower abdominal pain, vaginal discharge, vaginal itching/pain, menstrual disorders, urinary incontinence and dyspareunia/sexual problems. The questions about lower abdominal pain, vaginal discharge, vaginal itching/pain and dyspareunia/sexual problems were answered on a six-point frequency scale (0 = never, 1 = once, 2 = less than once a month, 3 = once a month, 4 = once a week, 5 = daily). Questions about STIs and urinary incontinence were answered with yes or no.

Pregnancy-associated conditions mentioned in the questionnaire - miscarriage, prematurity (< 37 weeks), low birth weight (< 2500 g) and induced abortion - were measured by yes or no answers.

To study the association between IPV and gynaecological and pregnancy-associated conditions, we combined two groups of women to analyse the association within the group of women with an intimate relationship in the past year and women who ever had an intimate relationship in the past but not in the past year.

SAMPLE SIZE

An explorative study led us to expect that it would be feasible to include 10–15 family practices that would be visited once. We assumed that a family physician would see 20 patients in a morning, 10 of whom would be women of 18 years or older. On the basis of the lifetime IPV prevalence figure in family practices of ~30%, we expected to be able to include three abused women in every family practice. To include 30 abused women, we needed 10 family practices. We invited 15 practices, 12 of which consented to participate.

DATA ANALYSIS

Descriptive statistics were used to describe our population and prevalence of IPV. Chi-square tests were used to test the differences in gynaecological and pregnancy-associated conditions between abused and non-abused women. We calculated odds ratio (OR) and used a 95% confidence interval (CI).

The answers to the questions about gynaecological conditions that could be answered on a six-point frequency scale were divided into two categories (category 1: never to less than once a month, category 2: once a month to daily).

To analyse the difference in prevalence of menstrual disorders between abused and non-abused women, we excluded women of 51 years or older, based on women's mean age of menopause (20). To compare the prevalence of pregnancy-associated conditions between abused and non-abused women, women who had never been pregnant were excluded. We used SPSS 20 to analyse our data.

RESULTS

Of the 306 women who were invited to participate, 44 women refused to participate because they were too ill ($n = 14$), not interested ($n = 11$), lacked time ($n = 9$) or had other reasons ($n = 10$) (Fig. 1). In total, 262 women consented to participate. We did not register the number of women who attended the practice during our recruitment period. The mean age of the women who consented to participate was 46 years [standard deviation (SD) 15.09], ranging from 18 to 85 years, which differed significantly ($p < 0.05$) from the non-responders (56 years, SD 19.64). Most respondents were married (53.4%), had a middle education level (40.1%) and were native Dutch (89.6%) (Table 1). Three out of four women (75%) had had an intimate relationship in the past 12 months.

PREVALENCE OF INTIMATE PARTNER VIOLENCE

The prevalence of IPV in the past 12 months was 8.7% among the women with an intimate relationship in the past year who attended the family practice without their partner ($n = 194$, 3 missing data on IPV). The lifetime prevalence of IPV was 17.6% among the women attending family practice who ever had an intimate relationship, but who had not had an intimate relationship in the past year ($n = 51$, 1 missing data on IPV).

INTIMATE PARTNER VIOLENCE AND GYNAECOLOGICAL CONDITIONS

Differences in gynaecological conditions between abused and non-abused women were analysed within the total group of women ($n = 245$) who had had an intimate relationship in the past year ($n = 194$) or ever had an intimate relationship but not in the past year ($n = 51$).

Differences in menstrual disorders were analysed within the group of women who had ever had an intimate relationship and were younger than 51 years. STIs (27% versus 7%, OR = 4.6, 95% CI = 1.7–12.5), menstrual disorders (33% versus 12%, OR = 3.7, 95% CI = 1.2–11.2) and sexual problems (23% versus 8%, OR = 3.3, 95% CI = 1.2–9.3) were significantly more common in abused women than in non-abused women. Lower abdominal pain (35% versus 25%, OR = 1.6, 95% CI = 0.7–3.8), vaginal discharge (19% versus 24%, OR = 0.8, 95% CI = 0.3–2.1), vaginal itching/pain (8% versus 11%, OR = 0.7, 95% CI = 0.2–3.1) and urinary incontinence (20% versus 17%, OR = 1.2, 95% CI = 0.4–3.8) did not differ significantly between abused and non-abused women (Table 2).

INTIMATE PARTNER VIOLENCE AND PREGNANCY-ASSOCIATED CONDITIONS

We analysed the differences in pregnancy-associated conditions between abused and non-abused women among all women (n = 245) who had had an intimate relationship in the past year (n = 194) or had ever been in an intimate relationship (n = 51) and had ever been pregnant in their lives (n = 207). Miscarriage (56% versus 34%, OR = 2.5, 95% CI = 1.1–5.8) or induced abortion (28% versus 12%, OR = 2.7, 95% CI = 1.0–7.3) was reported significantly more often by women who were victims of IPV than by women who never experienced IPV. Premature birth (< 37 weeks) (17% versus 13%, OR = 1.4, 95% CI = 0.4–4.5) or low birth weight (< 2500 g) (21% versus 11%, OR = 2.1, 95% CI = 0.7–6.4) did not differ significantly between abused and non-abused women (Table 3).

DISCUSSION

MAIN FINDINGS

Our study shows that 8.7% of women who had an intimate relationship in the past year and were not accompanied by their partner when visiting their family physician experienced IPV in the past 12 months. This corresponds with other prevalence studies in family practice that found a prevalence of IPV in the past 12 months between 7.2% and 17%, although these do not restrict their measurement of IPV to the group of women who had an intimate relationship in the past year (2,3). The lifetime prevalence of IPV among women attending family practice who had ever had an intimate relationship, but not in the past year (17.6%), is low compared with other prevalence studies, which found that 30–45% of women attending family practice had been victims of IPV at some point in their lives (2–4). These other studies used different methods to measure IPV and did not use our restriction of including only women attending family practice who had ever had an intimate relationship but not in the past year. This might account for the differences in lifetime prevalence that we found.

Another explanation for differences in findings might be that female patients attending family practice who were accompanied by their partners were excluded from our study for safety reasons. A partner who often accompanies a female patient could be considered to be showing controlling behaviour, which is a key feature of IPV. Exclusion of this group of women may possibly have led to under-detection of IPV in our study. Although two of the prevalence studies described above also used partner attendance as an exclusion criterion (3,4), one study did not describe exclusion of women when they were accompanied by their partner (2).

Our study results in family practice are in line with the results of earlier studies in other medical settings, which also demonstrated that STIs (12,14), menstrual disorders (14) and sexual problems such as dyspareunia (11) were more prevalent among female victims of IPV. Similar to John et al. (11), we did not find an association between urinary incontinence and IPV. In our study, we were unable to confirm an association between IPV and lower abdominal pain (11); vaginal discharge (15); and vaginitis, vulvitis and cervicitis (14).

It is striking that miscarriage and induced abortion were again significantly more common in abused women than in non-abused women. Han et al. (17) also found that female victims of IPV had miscarriages more often. The study by Pallitto et al. (13) found that induced abortion was also more prevalent in the group of abused women.

Early birth (< 37 weeks) and low birth weight did not differ significantly between both groups. Watson et al. (21) also found that early birth was not significantly more common in female victims of IPV and that they attributed the lack of association between early birth and IPV to the heterogeneity of causes of very preterm birth.

The heterogeneity of very preterm birth aetiologies probably also accounts for the lack of associations we found between early birth and IPV. The differences in outcomes can partly be explained by the fact that none of the studies mentioned above were conducted in family practice.

Moreover, our small sample size, insufficient statistical power and use of different definitions of IPV and gynaecological and pregnancy-associated conditions may also be reasons for the lack of associations we found.

STRENGTHS AND LIMITATIONS

Strengths

This is the first study in family practice to focus on the prevalence of gynaecological and pregnancy-associated conditions in abused women compared with non-abused women. As the family practice is often the first place for abused women to present their health problems, it is important to assess whether some specific problems are more common in abused women than in non-abused women. This would enable improvement of IPV

recognition and early intervention to diminish the harmful effects of abuse. Furthermore, we used a validated questionnaire (CAS) to measure IPV (19).

Limitations

We used the CAS to measure IPV. For women who have an intimate relationship or had one in the past 12 months, the CAS measures the presence of IPV in the past year; for women who did not have an intimate relationship in the past year but had an intimate relationship in the past, the CAS measures if they have ever been victim of IPV in their lives. Under-detection of IPV, therefore, is possible in women who were abused by their partner at some point in the past but who have been in a non-violent relationship in the past year. Because harmful effects of abuse are often long term, it is preferable to measure lifetime prevalence of IPV. Our small study group may possibly explain the lack of association we found between IPV and some gynaecological and pregnancy-associated conditions. Self-report questionnaires, moreover, are subject to memory bias and socially desirable answers, especially with a topic such as IPV, which is often accompanied by feelings of shame and guilt. Although we tried to select a representative sample of family practices in the Netherlands, self-selection of practices may cause selection bias and thus influence the generalizability of our findings.

IMPLICATIONS FOR FUTURE RESEARCH AND CLINICAL PRACTICE

IPV often causes physical and mental health problems in the long term. In future research, focusing on the association between IPV and health problems, therefore, we recommend adding an extra question to the CAS to measure the lifetime prevalence of IPV in the group of women who have an intimate relationship or had one in the past 12 months.

Our results indicate that certain gynaecological and pregnancy-associated conditions are more common in abused women attending family practice. Therefore, we recommend family physicians to consider these findings in their practice. Furthermore, we recommend researchers to use our preliminary data to inform the design of a large-scale national or multinational study or a prospective meta-analysis of several independent studies in several nations.

Although some gynaecological and pregnancy-associated conditions might be considered as risk indicators for abuse, the heterogeneity of causes of most health problems still makes it difficult for family physicians to recognize IPV. It would be interesting, therefore, to study the predictive value of a combined model of symptoms or problems. Finally, we believe that identification of IPV is not enough to increase screening practices by family physicians and that more studies on interventions are needed before screening practices will be successful and implemented routinely by physicians.

CONCLUSION

Family physicians should consider and ask women about IPV when they present with STIs, menstrual disorders, sexual problems, miscarriages or induced abortions. In order to identify risk indicators for IPV properly, more research is needed to demonstrate whether a combination of symptoms offers improved prediction of the presence of IPV.

ACKNOWLEDGEMENTS

We would like to thank Simone Vermeulen for data processing in SPSS.

DECLARATION

Funding: the Nijmegen local council (the Netherlands) and ZonMw (15702.0004) (the Netherlands).

Ethical approval: none.

Conflict of interest: none.

REFERENCES

1. Campbell JC. Health consequences of intimate partner violence. *Lancet* 2002; 359: 1331–6.
2. Richardson J, Coid J, Petruckevitch A et al. Identifying domestic violence: cross sectional survey of women attending general practice. *BMJ* 2002; 324: 274–80.
3. Hegarty KL, Bush R. Prevalence and associations of partner abuse in women attending general practice: a cross-sectional survey. *Aust N Z J Public Health* 2002; 26: 437–42.
4. Prozman GJ, Jansen SJ, Lo Fo Wong SH, Lagro-Janssen AL. Prevalence of intimate partner violence among migrant and native women attending general practice and the association between intimate partner violence and depression. *Fam Pract* 2011; 28: 267–71.
5. Prozman GJ, Lo Fo Wong SH, Bulte E, Lagro-Janssen AL. Healthcare utilization by abused women: a case control study. *Eur J Gen Pract* 2012; 18: 107–13.
6. Ramsay J, Richardson J, Carter YH, Davidson LL, Feder G. Should health professionals screen women for domestic violence? Systematic review. *BMJ* 2002; 325: 314.
7. Prozman GJ, Lo Fo Wong SH, Lagro-Janssen AL. Why abused women do not seek professional help: a qualitative study. *Scand J Caring Sci* 2014; 28: 3–11.
8. Beynon CE, Gutmanis IA, Tutty LM, Wathen CN, MacMillan HL. Why physicians and nurses ask (or don't) about partner violence: a qualitative analysis. *BMC Public Health* 2012; 12: 473.
9. Lagdon S, Armour C, Stringer M. Adult experience of mental health outcomes as a result of intimate partner violence victimisation: a systematic review. *Eur J Psychotraumatol* 2014; 5: 1–12.
10. Campbell J, Jones AS, Dienemann J et al. Intimate partner violence and physical health consequences. *Arch Intern Med* 2002; 162: 1157–63.
11. John R, Johnson JK, Kukreja S, Found M, Lindow SW. Domestic violence: prevalence and association with gynaecological symptoms. *BJOG* 2004; 111: 1128–32.
12. Spiwak R, Afifi TO, Halli S, Garcia-Moreno C, Sareen J. The relationship between physical intimate partner violence and sexually transmitted infection among women in India and the United States. *J Interpers Violence* 2013; 28: 2770–91.
13. Pallitto CC, García-Moreno C, Jansen HA et al.; WHO Multi-Country Study on Women's Health and Domestic Violence. Intimate partner violence, abortion, and unintended pregnancy: results from the WHO Multicountry Study on Women's Health and Domestic Violence. *Int J Gynaecol Obstet* 2013; 120: 3–9.
14. Bonomi AE, Anderson ML, Reid RJ et al. Medical and psychosocial diagnoses in women with a history of intimate partner violence. *Arch Intern Med* 2009; 169: 1692–7.
15. Raj A, Liu R, McCleary-Sills J, Silverman JG. South Asian victims of intimate partner violence more likely than non-victims to report sexual health concerns. *J Immigr Health* 2005; 7: 85–91.
16. Devries KM, Kishor S, Johnson H et al. Intimate partner violence during pregnancy: analysis of prevalence data from 19 countries. *Reprod Health Matters* 2010; 18: 158–70.
17. Han A, Stewart DE. Maternal and fetal outcomes of intimate partner violence associated with pregnancy in the Latin American and Caribbean region. *Int J Gynaecol Obstet* 2014; 124: 6–11.

18. Loeffen MJ, Lo Fo Wong SH, Wester FP, Laurant MG, Lagro-Janssen AL. Implementing mentor mothers in family practice to support abused mothers: study protocol. *BMC Fam Pract* 2011; 12: 113.
19. Hegarty K, Fracgp D, Bush R, Sheehan M. The composite abuse scale: further development and assessment of reliability and validity of a multidimensional partner abuse measure in clinical settings. *Violence Vict* 2005; 20:529–47.
20. Trimbos Kemper GCM. Patient counseling. The menopause [Patiëntenvoorlichting. De overgang]. http://www.nvog.nl/Sites/Files/0000000108_Overgang.pdf (accessed on 2002).
21. Watson LF, Taft AJ. Intimate partner violence and the association with very preterm birth. *Birth* 2013; 40: 17–23.

TABLES & FIGURES

Figure 1 Flow chart participants

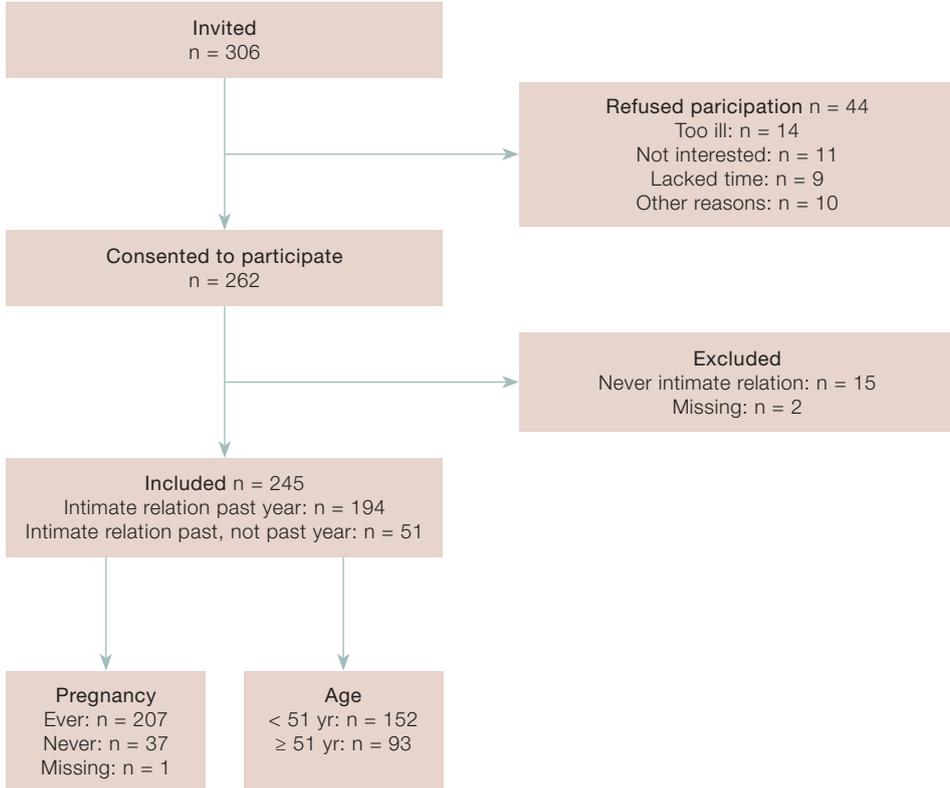


Table 1 Marital status, education level and country of origin of women who consented to participate (n = 262)

	Mean (SD)	Range
Age	46.26 (15.09)	18-85
	n	Percentage
Marital status		
Unmarried	81	30.9
Married / registered partnership	140	53.4
Divorced	30	11.5
Widowed	11	4.2
Education level		
Low	68	25.9
Middle	105	40.1
High	89	34
Country of origin (<i>missing: n = 2</i>)		
The Netherlands	233	88.9
Other	27	10.3
Missing	2	0.8

Table 2 (a) Prevalence of gynaecological conditions in abused and non-abused women^a who ever had an intimate relationship (n = 245, 4 missing data on intimate partner violence). (b) Prevalence of menstrual disorders in abused and non-abused women who ever had an intimate relationship^a and were younger than 51 years of age (n = 152, 2 missing data on intimate partner violence)

(a) Gynaecological condition		IPV- (n = 215)	IPV+ (n = 26)	OR	95% CI
STI (n = 240, 5 missing)	No	198 (93%)	19 (73%)	4.6 ^b	1.7–12.5
	Yes	16 (7%)	7 (27%)		
Lower abdominal pain (n = 239, 6 missing)	Never to < once a month	160 (75%)	17 (65%)	1.6	0.7–3.8
	Once a month to daily	53 (25%)	9 (35%)		
Vaginal discharge (n = 238, 7 missing)	Never to < once a month	161 (76%)	21 (81%)	0.8	0.3–2.1
	Once a month to daily	51 (24%)	5 (19%)		
Vaginal itching / pain (n = 239, 6 missing)	Never to < once a month	190 (89%)	24 (92%)	0.7	0.2–3.1
	Once a month to daily	23 (11%)	2 (8%)		
Urinary incontinence (n = 163, 82 missing)	No	118 (83%)	16 (80%)	1.2	0.4–3.8
	Yes	25 (17%)	4 (20%)		
Sexual problems (n = 229, 16 missing)	Never to < once a month	186 (92%)	20 (77%)	3.3 ^b	1.2–9.3
	Once a month to daily	17 (8%)	6 (23%)		
(b) Gynaecological condition		IPV- (n = 132)	IPV+ (n = 18)	OR	95% CI
Menstrual disorders (n = 143, 9 missing)	No	110 (88%)	12 (67%)	3.7 ^b	1.2–11.2
	Yes	15 (12%)	6 (33%)		

^a Past-year prevalence of IPV was measured within the group of women who had had an intimate relationship the past year. Women presenting with their partners were excluded from the sample.

Lifetime prevalence of IPV was measured within the group of women who did not have an intimate relationship in the past year but had had an intimate relationship in the past.

^b Significant.

Table 3 Prevalence of pregnancy-associated conditions in abused and non-abused women^a who have ever been pregnant (n = 207, 2 missing data on intimate partner violence)

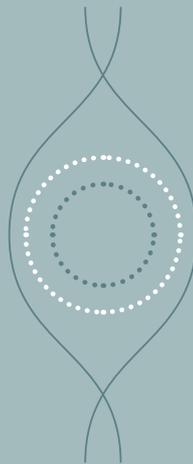
Pregnancy-associated condition		IPV- (n = 180)	IPV+ (n = 25)	OR	95% CI
Miscarriage (n = 202, 5 missing)	No	117 (66%)	11 (44%)	2.5 ^b	1.1–5.8
	Yes	60 (34%)	14 (56%)		
Premature birth (< 37 weeks; n = 200, 7 missing)	No	154 (87%)	19 (83%)	1.4	0.4–4.5
	Yes	23 (13%)	4 (17%)		
Low birth weight (< 2500 g; n = 198, 9 missing)	No	155 (89%)	19 (79%)	2.1	0.7–6.4
	Yes	19 (11%)	5 (21%)		
Induced abortion (n = 202, 5 missing)	No	155 (88%)	18 (72%)	2.7 ^b	1.0–7.3
	Yes	22 (12%)	7 (28%)		

^a Past-year prevalence of IPV was measured within the group of women who had had an intimate relationship the past year. Women presenting with their partners were excluded from the sample.

Lifetime prevalence of IPV was measured within the group of women who did not have an intimate relationship the past year but had had an intimate relationship in the past.

^b Significant.

CHAPTER 3
FACILITATORS AND BARRIERS
OF IMPLEMENTATION OF
PARAPROFESSIONAL SUPPORT
FOR ABUSED WOMEN
IN PRIMARY CARE:
A MIXED METHODS STUDY



Maartje Loeffen
Karin van Rosmalen-Nooijens
Fred Wester
Miranda Laurant
Sylvie Lo Fo Wong
Antoine Lagro-Janssen

Submitted

ABSTRACT

INTRODUCTION Paraprofessional support is a low threshold method in primary care that might help abused women to stop the violence. In order to optimize the effect of these interventions we want to find out which factors facilitate or hinder the implementation.

METHODS The electronic databases of PubMed, PsycINFO, Embase and Scopus were searched up to April 2014. Because original implementation studies were not identified, we included effectiveness studies and focused on the description of facilitators and barriers within these studies. Interviews with the authors of selected studies were added for more extensive information about the facilitators and barriers of implementation. A qualitative analysis of the articles and interviews was performed.

RESULTS A total of 1117 articles were screened for inclusion, and finally eight articles applied to the selection criteria. We interviewed seven authors of six articles. The selected studies consisted of three RCT's, two observational studies and three before and after studies. Important societal conditions are financing, time and attitude. On the individual level, the healthcare provider's attitude and self-efficacy, the abused woman's readiness for change, the paraprofessional's proactivity, and bond between abused woman and paraprofessional are important factors that influence implementation. On the intervention level, routine screening, training, matching and a plan that fits the woman's needs were mentioned as facilitators.

CONCLUSIONS Training of healthcare providers should focus on their own attitude and abused women's readiness for change. Commitment and proactivity of healthcare providers are essential to reach abused women and prevent preliminary termination of support.

INTRODUCTION

Intimate partner violence (IPV) is a worldwide highly prevalent problem (1) that mostly affects women and has negative consequences for their physical and mental health. (2) Gynaecological problems, central nervous system problems like headaches, and chronic stress related problems like unexplained abdominal pain, are often experienced by abused women. (3) They are more at risk to develop depression, posttraumatic stress disorder or substance abuse than non-victims. These physical and mental health problems consequently lead to a relatively high utilization of health care by abused women. (4)

Children are often exposed to the abuse of their mother which has a negative impact on their well-being leading to behavioral and learning problems. (5)

Family physicians are often the first healthcare providers women turn to for help and have the opportunity to help women to break through the cycle of violence. Abused women also identify primary care clinicians as the people they would seek support from (6). Therefore family physicians play a crucial role in identifying and discussing the abuse.

Both high prevalence, with lifetime prevalence rates between 30-45% in family practice (7-16), as well as negative health consequences of IPV emphasize the need for the development of an effective intervention for this vulnerable group of women within primary care.

The existing interventions for battered women often consist of professional support in shelter homes, which are often a too high threshold for battered women. Support by paraprofessionals offers a lower threshold support method resulting in more female victims accepting help. (17) In this study we therefore will focus on interventions for abused women delivered by paraprofessionals.

Various interventions have been developed and studied with variable outcomes. Besides the evaluation of the effect it is important to find out which factors facilitate or hinder the implementation of an intervention in order to optimize the effect. Therefore our study will focus on the facilitators and barriers of the implementation of paraprofessional support for female victims of IPV in primary care.

METHODS

LITERATURE SEARCH

The electronic databases of PubMed, Psycinfo, Embase and Scopus were searched up to April 2014 with the keywords: IPV, intervention, and primary care. The search terms were chosen by an expert panel with help of a librarian. In addition we checked the references of all included articles. The search was limited to the time period from 1998 to 2014.

Because the search did not identify original studies that focus on the implementation of paraprofessional support in primary care, we included effectiveness studies and focused on the description of facilitators and barriers in the implementation within these studies.

SELECTION OF ARTICLES

Title and abstract were used to select articles that described original effectiveness studies of interventions with paraprofessionals focused on support of female victims of IPV within primary care. Studies were considered eligible when they included at least one of the following outcome measures: 1) IPV, 2) health of women, 3) mother-child relationship, 4) social support or 5) acceptance of help. Intervention studies that focused on screening or group therapy or alternative medicine, were excluded.

All articles that met the inclusion criteria were read full text by two reviewers (MLo and KR) for detailed information to independently re-check the inclusion and exclusion criteria. If there was no consensus on inclusion two other reviewers (TLJ and MLa) were consulted.

INTERVIEWS

In order to find more information about the facilitators and barriers of the implementation of the interventions, we invited the authors of the selected studies by e-mail for an interview by telephone. We developed an interview guide consisting of 14 questions that mainly focus on the authors' view on factors that influence implementation of their intervention in daily practice (Appendix A). All interviews were recorded and transcribed with participants' consent.

DATA ANALYSIS

A qualitative analysis of the articles and interviews was performed. The articles and transcripts of the interviews were studied and coded by one reviewer (MLo). Themes that emerged were discussed with an expert panel which finally led to a description of the facilitators and barriers of implementation of paraprofessional support for female victims of IPV in primary care.

RESULTS

A total of **1360** articles were identified by using the described keywords with **243** duplicates, resulting in **1117** abstracts which were independently screened for inclusion by the two reviewers. **Seventeen** articles were selected for review in full length, resulting in a final pool of **8** articles (18-26) that applied to the selection criteria (Figure 1, Table 1). We succeeded to

interview seven authors about six of the eight interventions selected (Figure 1). Two authors were interviewed about the same intervention. One author did not want to be interviewed because she was not (directly) involved with the implementation of the intervention, but only studied the effectiveness of the intervention described. The other author could not be contacted even after several attempts by telephone and e-mail. The interviews lasted 30-60 minutes.

The selected studies consisted of three randomized controlled trials, two observational studies and three before and after studies. All interventions consisted of paraprofessional support for female victims of IPV in primary care and differed in setting, participants and outcomes studied. (Table 1)

In our qualitative analysis of the interviews we identified facilitators and barriers of implementation that we categorized into 3 different levels: 1) societal conditions, 2) individual (healthcare provider, abused woman, paraprofessional), and 3) intervention (Table 2).

SOCIETAL CONDITIONS

In order to develop and implement an intervention for female victims of IPV adequate **financing** is necessary. The relatively low costs of paraprofessionals and adequate funding are important facilitators for successful implementation of the interventions described.

Lack of **time** is mentioned as a barrier for the identification and discussion of abuse by the healthcare provider.

The **attitude** in the community towards IPV is another important factor that influences implementation in several ways. When IPV is openly discussed and is considered unacceptable, abused women will more easily disclose IPV. Awareness in the community might also influence the attitude of the healthcare provider towards IPV and thereby improves the identification of it. The respondents argue that a cultural change within the healthcare system and community is needed, making screening or active questioning and referral becoming routine and a more accepted procedure.

INDIVIDUAL

On the individual level we distinguish the healthcare provider, the abused woman, and the paraprofessional. The healthcare provider needs to identify IPV and decide to refer an abused woman to a paraprofessional. The abused woman needs to accept the support that is offered. Next, completion of the support is influenced by both the abused woman and the paraprofessional.

Healthcare provider

The **attitude** of the healthcare provider towards IPV is an important factor on the level of the individual and is influenced by the attitude in the community as described above. A healthcare provider, who is patient centered, empathic and considers IPV as unacceptable and as a part of his or her job, will improve the abuse identification rate.

Self-efficacy of the healthcare provider, meaning that he or she feels competent to identify and discuss the abuse, is another important factor that influences the identification of abuse. A healthcare provider, who does not feel competent, despite training, is viewed as an important barrier for identification of IPV and hinders successful implementation. Although training is mentioned as an important facilitator on the intervention level, it cannot directly or completely take away a feeling of incompetence.

When healthcare providers have positive **experiences** with paraprofessional support, referral of abused women to a paraprofessional will become more likely.

Abused woman

The readiness for change is one of the important factors that will determine whether an abused woman accepts or rejects the offered support. A woman first has to acknowledge the fact that she is abused and has to be open and ready for help. The support that is offered needs to fit her stage of change in order to become accepted.

When abused women had negative **experiences** with IPV interventions in the past, this will hinder acceptance of the paraprofessional support that is offered.

Fear of an abused woman to lose her children when they accept help or fear of retaliation by the perpetrator are other important barriers for implementation on the individual level.

When abused women have positive **experiences** with the paraprofessional support, completion of the intervention will be more likely.

On the other hand, completion is hindered by **contact** problems, because of moving and wrong or change of telephone numbers, and **competing demands** in the lives of these women, such as work and care for children.

Paraprofessional

Proactivity of the paraprofessional is essential to prevent preliminary termination of the support that is offered which is a well-known problem within this group of vulnerable women. A paraprofessional needs to put effort to stay in touch with an abused woman even when she does not show up (several times) or initially seems to reject the support that is offered.

Paraprofessional – abused woman

A growing **bond** between paraprofessional and abused woman facilitates continuation of the support. A paraprofessional, who is considered a professional friend who is non-judgmental, will create a safe environment.

INTERVENTION

Some authors of the selected studies agreed that identification of abused women by health care providers is facilitated by **routine screening**, meaning that every woman is asked about IPV regardless of IPV being suspected or not. The method of screening can also influence disclosure and thereby the identification of IPV. **Face to face screening** might hinder identification of IPV because of confidentiality issues as proximity to other patients when screening occurs in a typical triage area. These confidentiality issues can be overcome by using other screening methods, like computer based screening.

Referral of abused women to a paraprofessional by healthcare providers is facilitated by the use of **protocols** that prescribe what to do when IPV is identified.

Training of healthcare providers is important but needs to be continued to improve identification and discussion of IPV. The more so, as we found that healthcare providers still feel incompetent despite training as already described above on the level of the individual. Also the paraprofessionals need to be trained and supervised in order to deliver support that is appreciated by abused women and thereby will facilitate completion of the support that is offered.

Arranging a good **match** of the paraprofessional and abused woman will positively influence the bond between both and thereby facilitates continuation of the support.

Home visiting lowers the threshold for acceptance of help and facilitates continuation of support. A good (24/7) **availability** of support was mentioned as an important facilitator for referral to a paraprofessional and acceptance of the help that is offered. Some recommended offering support directly when IPV is identified, because otherwise the urgency for help might fade away.

It is important to pay attention to the readiness for change of an abused woman and to make a **plan that fits the woman's needs**. This will make acceptance of the intervention by abused women more likely.

A too short period of support or inflexibility of the **duration** of the intervention are barriers for success. The intervention should be offered as long as the woman needs it and not for a fixed amount of time. Which again stresses the importance to develop a plan that fits the woman's needs or readiness for change.

DISCUSSION

MAIN FINDINGS

First of all IPV needs to be considered as unacceptable by both the healthcare provider and the larger society, which requires a cultural change. Besides the fact that the abused woman needs to be ready for change, the healthcare provider also needs to be ready and feel competent to identify and discuss the abuse and acknowledge it is a professional task.

Proactivity of paraprofessionals is essential to prevent preliminary termination of the support that is offered, which is a common problem within this vulnerable group of women. Professionals often get frustrated when women do not show up several times and are less proactive compared to paraprofessionals. This consequently leads to preliminary termination of support, while help from outside is needed, because IPV is not a problem to be solved in isolation.

Training and matching are factors that facilitate the healthcare provider and paraprofessional to offer support to an abused woman that meets her needs and fits her readiness for change.

It is also important to pay attention to the setting and duration of the intervention, because both bring about different facilitators and barriers of implementation. For instance good (24/7) availability is important in the emergency department, while in other settings, where there is a longer follow up of patients, a good match between paraprofessional and the abused woman is an important facilitator. Commitment of the paraprofessional is essential to develop a bond and create a safe environment, both very important for abused women who often have lost their trust in other people.

Routine screening was mentioned by some authors as a way to improve the identification of abuse. A recently published systematic review (27) also concludes that IPV is more frequently identified when routine screening is used, however the evidence of long term benefit for women is absent and thereby routine screening in healthcare settings is not justified. Besides, it is striking that some of these authors also mention the readiness for change as an important facilitator or barrier for the identification of abuse. Although routine screening might lead to an increase of the identification of IPV, it will not automatically lead to acceptance of the offered support, because an abused woman might not be ready or too fearful.

STRENGTHS AND LIMITATIONS

Strengths

This is the first study that focused on the factors that facilitate or hinder the implementation of an intervention with paraprofessionals for female victims of IPV in primary care. Most

studies and systematic reviews focus on the effectiveness of the intervention without systematically studying the implementation. We focused on interventions with paraprofessionals which are expected to lower the threshold for acceptance of support.

Because we did not find any studies that systematically studied implementation, we decided to interview the authors of the selected studies. We succeeded in interviewing 7 authors of 6 studies, and were able to ask through about their views on what factors facilitated or hindered the implementation of their intervention studied.

Limitations

None of the eight selected studies systematically studied the facilitators and barriers of the implementation of the described intervention.

Although we succeeded in interviewing the authors of six studies we were not able to interview the authors of all interventions. The results of the interviews depend on the personal views and experiences of the authors and are not based on original implementation studies. Furthermore, some of the authors interviewed were only involved with the analysis of the data and not with the intervention itself, which may make the authors less well informed about the implementation of the intervention.

IMPLICATIONS FOR FUTURE RESEARCH AND CLINICAL PRACTICE

During our literature search we found a lack of studies that focus on the implementation of paraprofessional support for female victims of IPV in primary healthcare. In order to optimize the implementation of an effective intervention, more studies are needed that systematically study these facilitating and hindering factors as only effect studies will not lead to change in the healthcare system.

Although some facilitators and barriers cannot easily be changed and more research is needed, our mixed method study already delivered some important recommendations for clinical practice.

First of all, ongoing training of healthcare providers is needed, and should not only focus on knowledge and skills to improve identification and discussion of abuse. This training should also pay attention to the healthcare provider's attitude towards IPV to make the healthcare provider feel ready and comfortable to identify and discuss the abuse.

Secondly, different settings require different intervention characteristics and therefore need to be taken into account while developing an intervention.

Finally, paraprofessionals offering client centered support that fits a woman's readiness for change is essential for the success of the intervention. Besides healthcare providers, also paraprofessionals need to be trained, supervised and supported in order to understand the readiness for change and how to deal with it. Denial of abuse and

preliminary termination of support are common in abused women and might lead to feelings of frustration in healthcare provider and paraprofessional. They may lead to less effort or cynicism, while commitment and a proactive attitude are essential in order to reach and help this vulnerable group of women.

CONCLUSION

A cultural change is needed to create an environment where IPV is considered unacceptable and will be openly discussed. Commitment and proactivity of healthcare providers are essential to create a safe environment for abused women leading to acceptance and continuation of support.

REFERENCES

1. Watts C, Zimmerman C. Violence against women: global scope and magnitude. *Lancet*. 2002;359(9313):1232-7.
2. Tjaden P, Thoennes N. Full Report of the Prevalence, Incidence and Consequences of Violence Against Women: Findings from the National Violence Against Women Survey. 2000.
3. Campbell J, Jones AS, Dienemann J, Kub J, Schollenberger J, O'Campo P, et al. Intimate partner violence and physical health consequences. *Archives of internal medicine*. 2002;162(10):1157-63.
4. Golding M. Intimate Partner Violence as a Risk Factor for Mental Disorders: A Meta-Analysis. *Journal of Family Violence*. 1999;14(2).
5. Holt S, Buckley H, Whelan S. The impact of exposure to domestic violence on children and young people: a review of the literature. *Child abuse & neglect*. 2008;32(8):797-810.
6. Feder GS, Hutson M, Ramsay J, Taket AR. Women exposed to intimate partner violence: expectations and experiences when they encounter health care professionals: a meta-analysis of qualitative studies. *Archives of internal medicine*. 2006;166(1):22-37.
7. Ahmad F, Hogg-Johnson S, Stewart DE, Levinson W. Violence involving intimate partners: prevalence in Canadian family practice. *Canadian family physician Medecin de famille canadien*. 2007;53(3):461-8, 0.
8. Bradley F, Smith M, Long J, O'Dowd T. Reported frequency of domestic violence: cross sectional survey of women attending general practice. *BMJ (Clinical research ed)*. 2002;324(7332):271.
9. Elliott BA, Johnson MM. Domestic violence in a primary care setting. Patterns and prevalence. *Archives of family medicine*. 1995;4(2):113-9.
10. Hegarty KL, Bush R. Prevalence and associations of partner abuse in women attending general practice: a cross-sectional survey. *Australian and New Zealand journal of public health*. 2002;26(5):437-42.
11. Lo Fo Wong S, Wester F, Mol S, Romkens R, Lagro-Janssen T. Utilisation of health care by women who have suffered abuse: a descriptive study on medical records in family practice. *The British journal of general practice : the journal of the Royal College of General Practitioners*. 2007;57(538):396-400.
12. Likhmatkina NV, Kuznetsova OY, Feder GS. Prevalence and associations of partner abuse in women attending Russian general practice. *Family practice*. 2010;27(6):625-31.
13. Prosman GJ, Jansen SJ, Lo Fo Wong SH, Lagro-Janssen AL. Prevalence of intimate partner violence among migrant and native women attending general practice and the association between intimate partner violence and depression. *Family practice*. 2011;28(3):267-71.
14. Prosman GJ, Lo Fo Wong SH, Bulte E, Lagro-Janssen AL. Healthcare utilization by abused women: a case control study. *The European journal of general practice*. 2012;18(2):107-13.
15. Richardson J, Coid J, Petruckevitch A, Chung WS, Moorey S, Feder G. Identifying domestic violence: cross sectional study in primary care. *BMJ (Clinical research ed)*. 2002;324(7332):274.
16. Ruiz-Perez I, Plazaola-Castano J. Intimate partner violence and mental health consequences in women attending family practice in Spain. *Psychosomatic medicine*. 2005;67(5):791-7.

17. Small R, Taft AJ, Brown SJ. The power of social connection and support in improving health: lessons from social support interventions with childbearing women. *BMC public health*. 2011;11 Suppl 5:S4.
18. Bair-Merritt MH, Jennings JM, Chen R, Burrell L, McFarlane E, Fuddy L, et al. Reducing maternal intimate partner violence after the birth of a child: a randomized controlled trial of the Hawaii Healthy Start Home Visitation Program. *Archives of pediatrics & adolescent medicine*. 2010;164(1):16-23.
19. Kendall J, Pelucio MT, Casaletto J, Thompson KP, Barnes S, Pettit E, et al. Impact of emergency department intimate partner violence intervention. *Journal of interpersonal violence*. 2009;24(2):280-306.
20. Krasnoff M, Moscatti R. Domestic violence screening and referral can be effective. *Annals of emergency medicine*. 2002;40(5):485-92.
21. Matseke G, Peltzer K, Habil. Screening and brief intervention for intimate partner violence among antenatal care attendees at primary healthcare clinics in Mpumalanga province, South Africa. *South African Journal of Obstetrics and Gynaecology*. 2013;19(2):40-3.
22. McFarlane J, Soeken K, Wiist W. An evaluation of interventions to decrease intimate partner violence to pregnant women. *Public health nursing (Boston, Mass)*. 2000;17(6):443-51.
23. Muelleman RL, Feighny KM. Effects of an emergency department-based advocacy program for battered women on community resource utilization. *Annals of emergency medicine*. 1999;33(1):62-6.
24. Prosman GJ, Lo Fo Wong SH, Lagro-Janssen ALM. Support by trained mentor mothers for abused women: A promising intervention in primary care. *Family Practice*. 2014;31(1):71-80.
25. Taft AJ, Small R, Hegarty KL, Lumley J, Watson LF, Gold L. MOSAIC (MOTHERS' Advocates In the Community): protocol and sample description of a cluster randomised trial of mentor mother support to reduce intimate partner violence among pregnant or recent mothers. *BMC public health*. 2009;9:159.
26. Taft AJ, Small R, Hegarty KL, Watson LF, Gold L, Lumley JA. Mothers' AdvocateS In the Community (MOSAIC)--non-professional mentor support to reduce intimate partner violence and depression in mothers: a cluster randomised trial in primary care. *BMC public health*. 2011;11:178.
27. Taft A, O'Doherty L, Hegarty K, Ramsay J, Davidson L, Feder G. Screening women for intimate partner violence in healthcare settings. *The Cochrane database of systematic reviews*. 2013;4:CD007007.

TABLES & FIGURES

Figure 1 Flow chart selection of studies

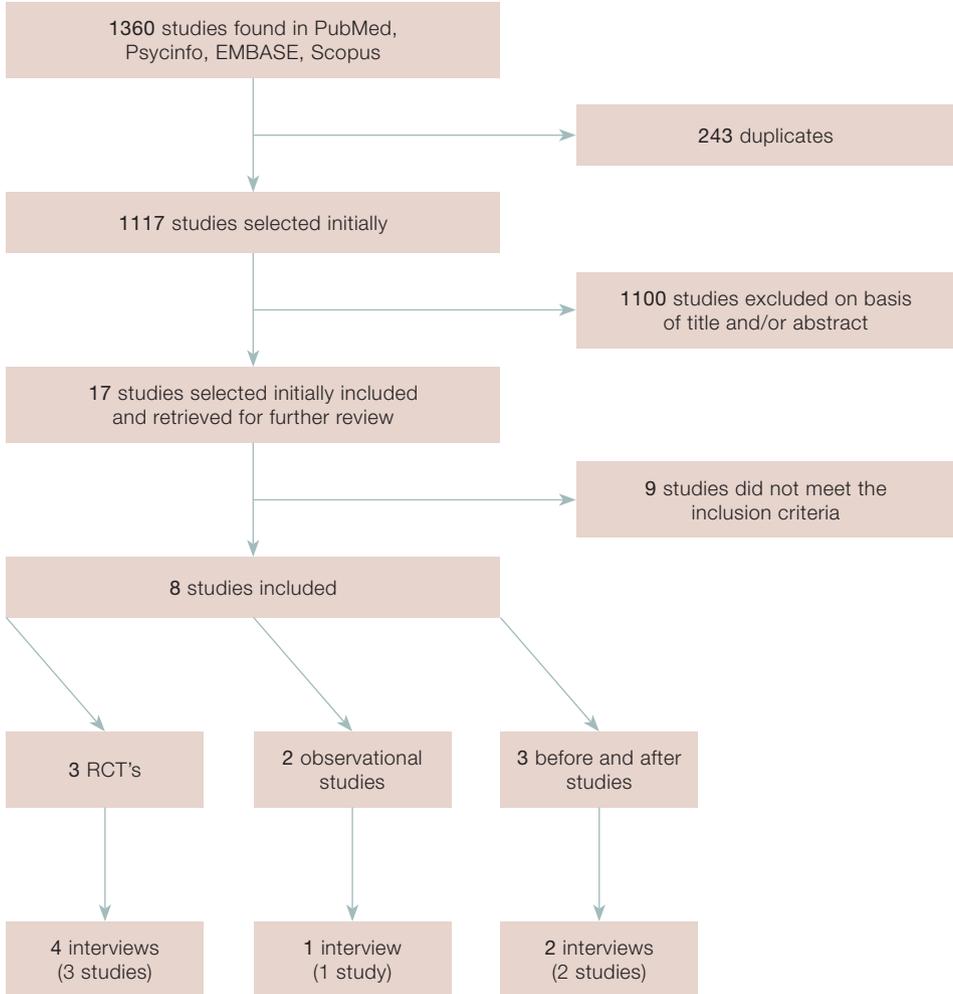


Table 1 Characteristics of included studies

First author	Year	Design	Setting	Participants	Intervention	Outcomes
Bair-Merritt	2010	RCT	At home	Families with an infant who was at high risk for maltreatment	Home visitors House visits after birth Weekly At least 3 years	IPV last year
Kendall	2008	Observational study	Emergency Department	Patients ≥ 12 yr. screened positive for IPV	IPV advocacy counselors 24-7 availability Assessment, safety plan, information on community resource	Safety perceptions Completion of safety plan Use of resource referrals
Krasnoff	2002	Observational study	Emergency Department	Women 18-65 yr. identified with IPV	Volunteer advocate Within 30 min 24-7 availability Crisis intervention (information, assessment, safety plan, documentation) Encourage follow-up with case manager	Patient cooperation Follow-up with case manager
Matseke	2013	Before and after study	Primary healthcare clinic	Pregnant women ≥ 18 yr. who screened positive for IPV	Community workers 20 minute session Supportive care Anticipatory guidance Guided referrals	IPV

First author	Year	Design	Setting	Participants	Intervention	Outcomes
Mc Farlane	2000	RCT	Prenatal clinic	Pregnant women	Brief: information card	Physical violence
				IPV recent year or during current pregnancy	Counseling: prof counselor	Women's use of community resources
					Outreach: + mentor mother (paraprof)	
Muelleman	1999	Before and after study	Emergency Department	Women identified as having sustained injuries by domestic violence	Advocate	Community resource utilization
		Baseline			Within 30 minutes	
		group – after advocacy group			Assessment, education, information resources	
Prosman	2014	Before and after study	Family practice	Mothers with children < 18 yr. living at home identified with IPV	Trained mentor mother	IPV
					Home visits	Depressive symptoms
					Weekly, during 16 weeks	Social support
					Support plan	Participation in society
					Supervision	Acceptance mental healthcare mother + child
Taft	2011	RCT	Family practice or MCH clinic *	Women ≥ 16 yr. Pregnant or mother of ≥ 1 child < 5 yr. IPV identified or suspected	Trained mentor mother	IPV
					Weekly, during 12 months	Depression
					Supervision	Physical and mental health
						Mother-child relationship
						Social support

* MCH clinic: mother child health clinic

Level	Factor	Mc Farlane		Muelleman		Prozman		Taft	
		F	B	F	B	F	B	F	B
Societal conditions	Financing		i			i		i	i
	Time								i
Healthcare provider	Attitude	i						i	i
	Attitude	i				i	i	i	i
	Self-efficacy								a
	Experiences					i			
Abused woman (Aw)	Readiness for change	i				a	i	i	i
	Fear				a		i		a
	Experiences	i					i		
	Contact		a + i						
	Competing demands								
Paraprofessional (Pp)	Proactivity								
Pp - Aw	Bonding	i				a + i		i	
	Routine screening	i						a	
	Face to face screening								
	Protocols	i							
	Training					i		i	
	Matching					a + i	i	i	
	Home visiting	i					i		
	Availability								
	Plan fits needs			a			a		
	Duration		i		a				

F = facilitator, B = barrier, a = article, i = interview

APPENDIX A: INTERVIEW GUIDE SYSTEMATIC REVIEW

Factors that facilitate or hinder implementation of non-professional help for female victims of IPV in primary care

INTRODUCTION

I am a family physician trainee and PhD student studying the implementation of a low threshold intervention (mentor mother support) for female victims of intimate partner violence in family practice.

For my systematic review I also focused on interventions for female victims of intimate partner violence in primary care. My primary objective is to find out which factors facilitate or hinder the implementation of the described intervention. My literature search provided eight intervention studies that met the inclusion criteria. Because all eight studies described the effect of the interventions, but did not focus on the implementation, I would like to interview the researchers of the studies on conditions relevant for implementation. Your intervention is one of the eight interventions selected and therefore I would like to interview you to find out which factors facilitated or hindered the implementation. The interview will take 30-45 minutes.

In order to transcribe the interview afterwards I would like to record our conversation. The transcription will be sent to you and offers the opportunity to comment on it. It will only be used for publication after your consent. Do you agree recording this interview?

GENERAL

In your article you describe the effect of your intervention on (outcomes). Because my systematic review mainly focuses on the implementation I first would like to know:

- 1) If your intervention is implemented in daily practice after the end of the study.
- 2)
 - a) If not, why do you think it is not implemented in daily practice? Which factors hindered the implementation?
 - b) If implemented, in your ideas, which factors facilitated the implementation of your intervention in daily practice? And which factors hindered the implementation?

INCLUSION

During my study I experienced some difficulties with the inclusion of abused women.

If problems described in the article:

In your study you also describe some problems with the inclusion of abused women.

- a) Why do you think you did not achieve the minimal amount of respondents in the beginning?
- b) How did you solve these problems / How did you overcome these barriers?

If not described:

- 3) Did you (finally) achieve the expected / minimal amount of participants during your study?
- 4) Did you also experience difficulties with the inclusion of abused women during your study? (Which inclusion problems did you encounter? In your ideas which factors caused these difficulties / inclusion problems?)

CHARACTERISTICS

In your article you describe your intervention as an intervention consisting of (characteristics intervention).

- 5) Which characteristics of your intervention made it successful? In your ideas why do these characteristics contribute to the success of your intervention?
- 6) Which characteristics of your intervention turned out to be hindering this success?

IDENTIFICATION

In my study, family physicians had to include abused women. Before inclusion they had to identify IPV. Research shows that intimate partner violence is often not recognized by healthcare professionals.

During your study abused women were included by (persons who identify IPV)

Were there any problems during your study when considering the identification of IPV? (Which problems did you encounter?)

- 7) Which factors facilitated identification of intimate partner violence in your study?
- 8) Which factors hindered identification of IPV in your study?

REFERRAL

In your study there was an option to refer abused women to an intervention consisting of non-professional help.

- 9) Which factors hindered healthcare professionals from referring abused women to your intervention?
- 10) Which factors facilitated referral of abused women to your intervention?

ACCEPTANCE

Offered care is often rejected by abused women.

- 11) Why do you think that abused women accepted your intervention?
- 12) Why did they reject your intervention?

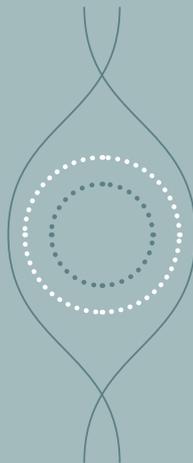
COMPLETION

Even when help is accepted abused women might stop the offered support.

In your study you describe a follow-up of ..% of included abused women.

- 13) Which factors contributed to completion of your intervention?
- 14) Which factors contributed to early cessation of your intervention?

CHAPTER 4
IMPLEMENTING MENTOR
MOTHERS IN FAMILY PRACTICE
TO SUPPORT ABUSED MOTHERS:
STUDY PROTOCOL



Maartje Loeffen
Sylvie Lo Fo Wong
Fred Wester
Miranda Laurant
Antoine Lagro-Janssen

*BMC Family practice 2011;
12 (113)*

ABSTRACT

BACKGROUND Intimate partner violence is highly prevalent and mostly affects women with negative consequences for their physical and mental health. Children often witness the violence which has negative consequences for their well-being too. Care offered by family physicians is often rejected because abused women experience a too high threshold. Mentor mother support, a low threshold intervention for abused mothers in family practice, proved to be feasible and effective in Rotterdam, the Netherlands. The primary aim of this study is to investigate which factors facilitate or hinder the implementation of mentor mother support in family practice. Besides we evaluate the effect of mentor mother support in a different region.

METHODS / DESIGN An observational study with pre- and posttests will be performed. Mothers with home living children or pregnant women who are victims of intimate partner violence will be offered mentor mother support by the participating family physicians. The implementation process evaluation consists of focus groups, interviews and questionnaires. In the effect evaluation intimate partner violence, the general health of the abused mother, the mother-child relationship, social support, and acceptance of professional help will be measured twice ($t = 0$ and $t = 6$ months) by questionnaires, reporting forms, medical records and interviews with the abused mothers. Qualitative coding will be used to analyze the data from the reporting forms, medical records, focus groups, interviews, and questionnaires. Quantitative data will be analyzed with descriptive statistics, chi square test and t-test matched pairs.

DISCUSSION While other intervention studies only evaluate the feasibility and effectiveness of the intervention, our primary aim is to evaluate the implementation process and thereby investigate which factors facilitate or hinder implementation of mentor mother support in family practice.

BACKGROUND

Domestic violence is highly prevalent and mostly affects women and children. (1) It has negative consequences for the physical and mental health of the victim. Poor mental health, as depression and anxiety, is the largest contribution to the burden of disease associated with intimate partner violence. (2) Children often witness the mental and/or physical abuse of their mother which has negative consequences for their well-being too. Children living with intimate partner violence are at increased risk of developing emotional and behavioral problems. (3) These children run the same risk to develop a depression or substance abuse or commit suicide as those children who were abused themselves. (4) They also are increased at risk to become a victim or perpetrator. (4,5) Therefore witnessing intimate partner violence as a child is considered as child abuse. Early identification of the violence is important to reduce these harmful effects for women and their children. Although family physicians often develop a long trusting relationship with their patient, they often do not recognize the violence. (6) After identification of intimate partner violence, it is important to offer adequate support. A communicative approach with empathy or empowering is valued most by these women. (7) The support that's currently offered by family physicians is often not suited for a woman's stage of change resulting in rejection of care offered by family physicians. However, there are two effective interventions that can overcome these problems.

The first effective intervention is training of family physicians in the identification and discussion of violence. Lo Fo Wong et al. demonstrated that an educational training of family physicians improves detection and discussion of the violence. (8) The second intervention is the introduction of trained mentor mothers in family practice. They can improve the acceptance of professional help by mother and child. It is based on the fact that social support is associated with good physical and mental health outcomes for women. (9) This intervention is primarily developed in Australia and showed an improvement of important clinical outcomes, as reduction of violence and improvement of general well-being. (10,11) The mentor mother support intervention has been modified to the Dutch situation by the department of Gender & Women's Health, Radboud University Nijmegen Medical Centre. The training for mentor mothers was further developed focusing on empowerment regarding four main themes: 1) safety, 2) social support, 3) depressive symptoms, and 4) children witnessing intimate partner violence. Feasibility and effectiveness of this intervention has been studied in Rotterdam: the MeMoSA (Mentor Mothers for Support and Advise) project 2007-2010. In the MeMoSA project Rotterdam mentor mothers were introduced in family practice and preliminary results showed a

decrease in violence, a decrease in mental health problems, an increase in acceptance of professional help for mother and child, and an increase in social support and activities.

(unpublished data, Prosmán GJ, Lo Fo Wong SH, Lagro-Janssen ALM)

We believe that mentor mother support is an effective approach justified to be implemented in family practice. To optimize the implementation, it is necessary to know the facilitators and barriers of implementation.

OBJECTIVES

PRIMARY OBJECTIVE

Determine which factors facilitate or hinder implementation of mentor mother support in family practice.

SECONDARY OBJECTIVE

Evaluate the effect of mentor mother support in a different region.

METHODS / DESIGN

STUDY DESIGN

An observational study with pre- and posttests will be performed.

PARTICIPANTS

Family physicians

Hundred fourteen family physicians, located in Nijmegen and surroundings received a training (described later) in recognizing and discussing intimate partner violence between September 2009 and January 2011. All trained family physicians and their colleagues working in the same family practice, have been invited for participation in the mentor mother support study. Non-respondents were approached by telephone within 3 weeks. Finally 87 family physicians out of 33 family practices, with about 110.000 patients, signed up to participate. Participants will document all mothers who are victims of intimate partner violence, meeting the inclusion criteria (described later) and are asked to enroll them. In focus groups several participating family physicians will discuss the factors that facilitate or hinder implementation of mentor mother support in family practice. All family physicians have to fill in a questionnaire at the end of the study.

Mentor mothers

Mentor mothers were recruited by healthcare contact persons of an abused women's shelter organization, involved family physicians, and a school for social healthcare. Recruitment and selection was based on the following criteria: 1) at least intermediate vocational education in healthcare, 2) motivated to become a mentor mother, 3) writing and verbal communicative skills, 4) stability, and 5) cultural diversity between mentor mothers. Interested women were asked to apply for this job and send their curriculum vitae. Ten women were invited for an interview and eight women were employed and trained by the mentor coordinator. The mentor mothers received a contract for 18 months for 8 hours a week. At the end of the study all mentor mothers will take part in a focus group.

Mentor coordinator

The mentor coordinator was recruited from the network of the local abused women's support and shelter organization. She is educated as social worker with training experience. The mentor coordinator is responsible for the training and supervision of mentor mothers, she matches the abused mothers with mentor mothers, and is the contact person for the participating family physicians. She will also participate in the focus group with all the mentor mothers at the end of the study.

Mothers who are victims of intimate partner violence

Family physicians will enroll abused mothers. The inclusion criteria are: 1) detected or suspected intimate partner violence and 2) the woman is a mother of children living at home or pregnant. The exclusion criteria are: 1) serious psychiatric problems, as psychosis, which requires psychiatric treatment, 2) serious physical disease which needs hospitalization, or 3) no contact possibilities with the mentor mother at home or at a family practice. Participating mothers have to fill out an informed consent form. In this form she agrees with 1) mentor mother support, 2) filling in a questionnaire twice (at the start of the support ($t = 0$) and 6 months after the start of the support ($t = 1$)), 3) a personal interview, 6 months after the start of the support, and 4) insight in her medical record.

(See figure 1)

INTERVENTION

Mentor mother support

Mentor mother support consists of: one hour weekly visit by a mentor mother, during 4 months, providing non-judgmental active listening and support, developing a trusting relationship and empowering. The aim of the support is to 1) achieve a reduction of the violence, 2) an expansion of social support and an increase of the acceptance of

professional help, 3) learn the abused mother to cope with depression/depressive symptoms, and 4) helping abused mothers to become aware of the effect on their child(ren). To lower the threshold for acceptance of help mentor mother support will be offered as support for mothers who experience difficulties with children living at home and not as a domestic violence support. Cultural background will be taken into account with matching when preferred by the abused mother. Visits will take place at home, at the family practice or any other place where the mother feels safe and comfortable. Every visit will be documented on a form and at the end the family physician will receive a written report.

In order to provide this specific support, mentor mothers received ten days of training previous to the start of mentor mother support. The training has been developed for the Dutch situation in Rotterdam and elaborates on 4 important themes: 1) providing safety and safety behaviors, 2) expansion of social support to break through the isolation of the mother and her child(ren), 3) coping with depressive symptoms and the acceptance of professional help, and 4) the effect of witnessing intimate partner violence on children and the acceptance of help for their child(ren). Mentor mothers and mentor coordinator meet every 2-4 weeks to discuss the content of the coaching and problems mentor mothers encounter. There is also a possibility to receive extra training. For urgent questions the mentor mother can contact the mentor coordinator by phone. All mentor mothers were provided with mobile phones for their personal safety.

Training family physicians

To improve recognition of intimate partner violence, family physicians were trained in small groups (12-15 participants) during 3 hours between September 2009 and January 2011. The aim of the training is to enhance awareness of non-obvious signs of intimate partner violence, to increase active questioning and to improve professional attitude, and response to abused women.

OUTCOME MEASURES

Primary outcome

The facilitators and barriers of successful implementation of mentor mother support in family practice are the primary outcomes and will be analyzed at four different levels (12):

- **Individual.** The individual level focuses on cognitive, motivational and behavioral factors and characteristics of the abused mothers, mentor mothers, mentor coordinator, and family physicians. For example, the motivation of family physicians to pay attention to intimate partner violence might be an important factor that influences implementation.

- **Social context.** At the social context level professional development, teams and networks of the family physicians, mentor mothers and mentor coordinator will be evaluated. Consensus about the effectiveness of mentor mother support within a family practice for instance, probably facilitates successful implementation.
- **Organizational.** Analysis on the organizational level focuses on organizational structures, processes and available resources within family practice. For example, limited room availability within a family practice, where mentor mother and abused mother can meet, might hinder successful implementation of mentor mother support.
- **Society.** Financing, laws and regulation, and characteristics within the group of professionals will be analyzed at the level of society. For example, financing of mentor mother support and paying attention to the problem of intimate partner violence by the government probably facilitates implementation.

Based on the results of mentor mother support in Australia (11) and Rotterdam ([unpublished data, Prosman GJ, Lo Fo Wong SH, Lagro-Janssen ALM](#)), we consider implementation of mentor mother support successful when the following 4 goals are accomplished:

- 1) Identification of at least 65 women who meet the inclusion criteria by participating family physicians.
- 2) Family physicians offering mentor mother support to at least 55 eligible women.
- 3) Acceptance of mentor mother support by at least 45 women who are offered mentor mother support.
- 4) At least 35 women completing mentor mother support.

Secondary outcomes

The secondary outcomes of the study are:

- Intimate partner violence
- The general health of the mother
- The mother-child relationship
- Social support
- Acceptance of professional help

With these outcomes we evaluate the effect of mentor mother support implemented in a different region and completely integrated in the family practice.

DATA COLLECTION

Evaluation of the implementation process

Registration forms will be used to investigate if the goals for successful implementation (described above) are accomplished. This means that family physicians have to fill in a registration form for every woman who meets the inclusion criteria. Mentor mothers register if abused mothers complete mentor mother support.

Focus groups with several family physicians (FP), who have or have not identified intimate partner violence and have or have not referred to a mentor mother, will be organized. Mentor mothers (MM) and mentor coordinator (MC) will also take part in a focus group focused on the implementation process. The list of subjects for the focus groups will be based on the evaluation of mentor mother support in Rotterdam, and on a theoretical framework for possible barriers and facilitators. (12) The results of the focus groups will be used to develop a questionnaire for all participating family physicians. The abused mothers (AM) will be interviewed 6 months after the start of mentor mother support ($t = 1$). (See figure 2).

Effect evaluation

- **Intimate partner violence** will be measured by the Composite Abuse Scale (CAS) (13) at the start ($t = 0$) and 6 months after the start ($t = 1$) of mentor mother support. This questionnaire is validated for the measurement of the presence, severity and type of intimate partner violence.
- The **general health** of the mother will be measured by the Symptom Checklist (SCL-90) (14) at the start ($t = 0$) and 6 months after the start ($t = 1$) of mentor mother support. This questionnaire measures physical and mental health complaints.
- The **mother-child relationship** will be measured using the NOSIK (15) at the start ($t = 0$) and 6 months after the start ($t = 1$) of mentor mother support. This structured questionnaire is the Dutch translation of the Parenting Stress Index Short Form (PSI-SF) (16) and measures the experienced stress of a parent.
- **Social support** will be measured by using reporting forms made by a mentor mother and an interview with the abused mother at the end of the support.
- **Acceptance of professional help** for mother and child(ren) will be measured by using reporting forms filled in by a mentor mother, the medical record and an interview with the abused mother at the end of the support.

DATA ANALYSIS

Evaluation of the implementation process

The interviews with the abused mothers, focus group with all mentor mothers and mentor coordinator, and focus groups with family physicians and their questionnaires will be analyzed focusing on facilitators and barriers of implementation on the four different levels described above. Qualitative data from the interviews and focus groups will be analyzed with qualitative coding in ATLAS.ti. Focus groups and interviews will be recorded and transcribed with participants' consent. Two researchers will study the transcripts independently, identify themes and establish the definite codes. Consensus will be reached in mutual discussion. Subsequently these outcomes will be formulated and interpreted in the research group for final results. Quotes will be used to underline these results. The questionnaires filled in by family physicians will consist of closed and open questions. Closed questions will be analyzed with descriptive statistics in SPSS 16.0, and open questions will be analyzed with qualitative coding in ATLAS.ti.

Effect evaluation

Quantitative data from the questionnaires (CAS, SCL-90, and NOSIK) will be analyzed with descriptive statistics in SPSS 16.0. Associations will be studied with the chi square test. T-test matched pairs will be used to test if the outcome measures (described above) differ significantly between pre- and posttest. Quantitative data from reporting forms and medical records will be analyzed with descriptive statistics in SPSS 16.0. Qualitative data from the reporting forms, medical records, and interviews with the abused mothers, will be analyzed with qualitative coding in ATLAS.ti.

DISCUSSION

The high prevalence and harmful effects of intimate partner violence emphasize the need for adequate help for this vulnerable group of women with children. Mentor mother support developed in Australia and modified to the Dutch situation proved to be feasible and effective. It is unique because it offers semiprofessional support in family practice which lowers the threshold to acceptance of help. Although there is some overlap between the studies in Rotterdam and Nijmegen, this study has several innovative features. Firstly, our primary aim is to investigate which factors facilitate or hinder a successful implementation of mentor mother support in family practice. Other studies only focused on feasibility and effectiveness and didn't evaluate the implementation process. By knowing the factors that facilitate or hinder implementation we can adjust them and thereby optimize the implementation of mentor mother support in family practice. Secondly we aim to assess

whether the effect of mentor mother support is comparable between Rotterdam and Nijmegen, because there are demographic differences between both populations. For example mean income and number of immigrants differ between both regions (17). Thirdly, it's important to consider the mother-child relationship, because continuing abuse affects the relationship of the mother and her child(ren). It has a negative impact on parenting and on quality of the mother-child bonding. A secure attachment to a non-violent parent seems to be an important protective factor in diminishing trauma and distress. (5) Fourthly, on account of the experiences in Rotterdam adjustments were made that can improve the effect of mentor mother support. This resulted in the idea of offering mentor mother support in the family practice and is expected to lower the threshold for the acceptance of mentor mother support. (8)

So while other studies primarily focused on effect evaluation, this study primarily investigates factors that contribute to the success or failure of the implementation. It offers the opportunity to strengthen the facilitating factors and take away the barriers for implementation and thereby optimizes the implementation of this low threshold intervention for mothers who are victims of intimate partner violence.

COMPETING INTERESTS

The authors declare that they have no competing interests.

AUTHORS' CONTRIBUTIONS

SLFW and TLJ are responsible for the design of the study. ML, FW, and MLa participated in the design of the study. ML wrote the first draft of the manuscript and SLFW, FW, MLa, and TLJ revised the manuscript critically. All authors read and approved the final manuscript.

AUTHORS' INFORMATION

ML is a psychologist, family physician trainee and PhD student at the department Gender & Women's Health, Primary and Community Care, Radboud University Nijmegen Medical Centre, the Netherlands. SLFW is a family physician and senior researcher at the department Gender & Women's Health, Primary and Community Care, Radboud University Nijmegen Medical Centre, the Netherlands. FW is an academic professor Communication Sciences at the Radboud University Nijmegen, the Netherlands. MLa is a senior research fellow at the Scientific Institute for Quality of Healthcare, Radboud University Nijmegen Medical

Centre, the Netherlands. TLJ is a family physician and academic professor Gender & Women's Health at the Radboud University Nijmegen Medical Centre, the Netherlands.

ACKNOWLEDGEMENT AND FUNDING

The project is funded by municipality of Nijmegen (the Netherlands) and ZonMw (the Netherlands).

ETHICAL APPROVAL

Upon consultation the Medical Ethics Committee of the Radboud University Nijmegen Medical Centre stated that ethical approval was not necessary. (27-06-2008)

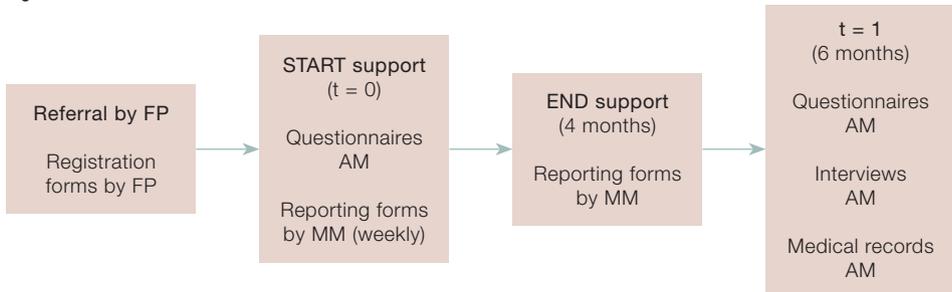
REFERENCES

1. Ferwerda H. Met de deur in huis: Omvang, aard, achtergrondkenmerken en aanpak van huiselijk geweld in 2006 op basis van landelijke politiecijfers. [Magnitude, nature, characteristics, and approach to domestic violence in 2006, based on nationwide police data.] Landelijk Project Huiselijk Geweld en de Politietoek 2006. Arnhem / Dordrecht; 2007.
2. Vos T, Astbury J, Piers LS, Magnus A, Heenan M, Stanley L, Walker L, Webster K: Measuring the impact of intimate partner violence on the health of women in Victoria, Australia. *Bull World Health Organ* 2006, 84:739-744.
3. Holt S, Buckley H, Whelan S: The impact of exposure to domestic violence on children and young people: a review of the literature. *Child Abuse Negl* 2008, 32:797-810.
4. Spatz Widom C: Childhood victimization: early adversity, later psychopathology. *National Institute of Justice Journal* 2000,3-9.
5. Glasser M, Kolvin I, Campbell D, Glasser A, Leitch I, Farrelly S: Cycle of child sexual abuse: links between being a victim and becoming a perpetrator. *Br J Psychiatry* 2001, 179:482-494.
6. Ramsay J, Richardson J, Carter YH, Davidson LL, Feder G: Should health professionals screen women for domestic violence? Systematic review. *BMJ* 2002, 325:314.
7. Lo Fo Wong S, Wester F, Mol S, Romkens R, Hezemans D, Lagro-Janssen T: Talking matters: abused women's views on disclosure of partner abuse to the family doctor and its role in handling the abuse situation. *Patient Educ Couns* 2008, 70:386-394.
8. Lo Fo Wong S, Wester F, Mol SS, Lagro-Janssen TL: Increased awareness of intimate partner abuse after training: a randomised controlled trial. *Br J Gen Pract* 2006, 56:249-257.
9. Coker AL, Smith PH, Thompson MP, McKeown RE, Bethea L, Davis KE: Social support protects against the negative effects of partner violence on mental health. *J Womens Health Gen Based Med* 2002, 11:465-476.
10. Taft AJ, Small R, Hegarty KL, Lumley J, Watson LF, Gold L: MOSAIC (MOTHERS' ADVOCATES In the Community): protocol and sample description of a cluster randomised trial of mentor mother support to reduce intimate partner violence among pregnant or recent mothers. *BMC Public Health* 2009, 9:159.
11. Taft AJ, Small R, Hegarty KL, Watson LF, Gold L, Lumley JA: Mothers' AdvocateS In the Community (MOSAIC)- non-professional mentor support to reduce intimate partner violence and depression in mothers: a cluster randomised trial in primary care. *BMC Public Health* 2011, 11:178.
12. Grol RPTM, Wensing MJP: Implementatie: effectieve verbetering van de patiëntenzorg [Implementation: effective improvement of patientcare]. Maarssen: Elsevier gezondheidszorg; 2006.
13. Hegarty K, Fracgo, Bush R, Sheehan M: The composite abuse scale: further development and assessment of reliability and validity of a multidimensional partner abuse measure in clinical settings. *Violence Vict* 2005, 20:529-547.
14. Arrindell W.A., Ettema J.H.M. SCL-90 Handleiding bij een multidimensionale psychopathologie indicator [SCL-90 Guide for a multidimensional psychopathology indicator]. Swets Tests Services. 1-1-2009. Lisse.

15. De Brock AJLL, Vermulst AA, Gerris JRM, Abidin R.R. NOSIK handleiding experimentele versie [NOSIK guide experimental version]. 1-1-1992. Amsterdam, Pearson.
16. Haskett ME, Ahern LS, Ward CS, Allaire JC: Factor structure and validity of the parenting stress index-short form. *J Clin Child Adolesc Psychol* 2006, 35:302-312.
17. Statline Centraal Bureau voor de Statistiek [<http://statline.cbs.nl/statweb/?LA = nl>]. 2011.

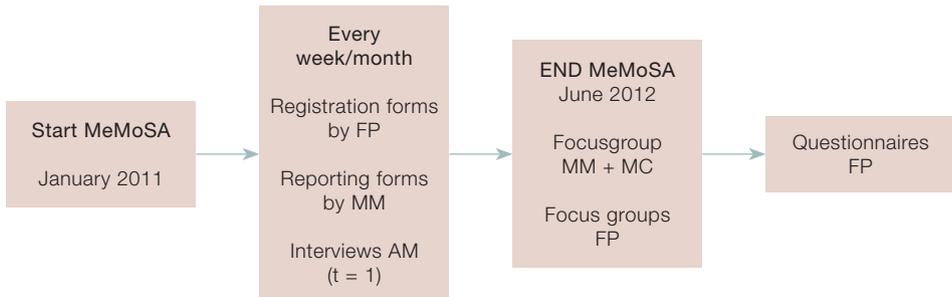
TABLES & FIGURES

Figure 1 Data collection effect evaluation



FP = family physician, MM = mentor mother, AM = abused mother

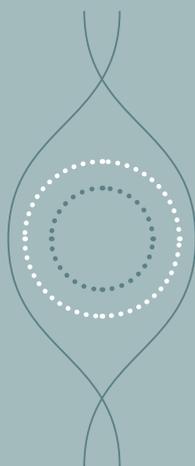
Figure 2 Data collection implementation process



FP = family physician, MM = mentor mother, AM = abused mother, MC = mentor coordinator

CHAPTER 5

MENTOR MOTHER SUPPORT
FOR MOTHERS EXPERIENCING
INTIMATE PARTNER VIOLENCE
IN FAMILY PRACTICE:
A QUALITATIVE STUDY OF
THREE DIFFERENT PERSPECTIVES
ON THE FACILITATORS AND
BARRIERS OF IMPLEMENTATION



Maartje Loeffen
Jasper Daemen
Fred Wester
Miranda Laurant
Sylvie Lo Fo Wong
Antoine Lagro-Janssen

European Journal of General Practice 2017;
23(1):27-34

ABSTRACT

BACKGROUND Intimate partner violence (IPV) is highly prevalent and associated with physical and mental health problems. Mentor mother support, a low threshold effective intervention consisting of paraprofessional support for female victims of IPV in family practice, showed a decreased exposure to IPV and decreased symptoms of depression.

OBJECTIVE Identify factors determining implementation success of mentor mother support in family practice.

METHODS Individual interviews were conducted with twelve family physicians, sixteen abused mothers and three mentor mothers. Four mentor mothers participated in a focus group. Data were analyzed using techniques of qualitative analysis.

RESULTS The identification and discussion of abuse is hindered by family physicians' attitudes because they considered the abused women as a difficult target group with a responsibility of their own to break through the violent situation. Some family physicians doubted on the violence of the partner, because he was known as a patient as well. Acceptance of mentor mother support is related to abused women's readiness for change. Mentor mothers facilitate acceptance and completion of support by connecting like a friend who is more equal and less threatening compared to professionals.

CONCLUSION To improve successful implementation of mentor mother support in primary care we should focus on family physicians' attitudes towards IPV. To change these attitudes we recommend continuous training of family physicians. By being professional friends, mentor mothers offer low threshold support that is complementary to professional support and should be broader embedded in primary care.

INTRODUCTION

Intimate Partner Violence (IPV) is a highly prevalent problem worldwide (1). It is defined as physical, sexual, and/or emotional abuse by an (ex-) partner and assumes power inequality between partners (2).

IPV has many negative consequences for abused women, with increased levels of physical complaints such as injury and gastrointestinal symptoms, as well as mental disorders such as depression and posttraumatic stress (3-5). Because of these negative health consequences, abused women visit their family physicians almost twice as often compared to non-abused women (6). A number of waiting room surveys in family practice record a lifetime prevalence of IPV between 30 and 45 percent (7-10). The family physician, therefore, is in a unique position to recognize and ask about abuse and has the opportunity to intervene and offer help to this vulnerable group of women. However, family physicians often do not recognize the hidden symptoms of IPV and abused women find it very hard to disclose (11-13). When IPV is identified by the family physician, it is important to offer an effective intervention that will be accepted by the abused woman in order to diminish the harmful effects of IPV (14).

An effective mentor mother support program from Melbourne (MOSAIC) has been adapted to the Dutch situation in Rotterdam and Nijmegen. The program – MeMoSA (Mentor Mothers for Support and Advise) – offers support during 16 weeks, with weekly visits of a mentor mother to support, empower and educate abused mothers (16, 17). Mentor mothers are paraprofessionals who received ten days of training to learn how to support abused mothers. The support was given at home or any other place, e.g. the family practice, where the mother felt safe and comfortable. The mentor mothers were supported and supervised by a mentor social worker (Nijmegen) with training experience. Family physicians who participated in the MeMoSA study received a three hour training to improve recognition and discussion of IPV, and could refer abused mothers to a mentor mother.

The study in Rotterdam showed similar positive results as MOSAIC favoring mentor mother support (15). The main findings were decreased exposure to IPV, reduced symptoms of depression and increased social support, participation in society and acceptance of mental health care for mother and child, making mentor mother support a very promising intervention (17, 18). The MeMoSA study in Nijmegen focused on a process evaluation. The aim of this process evaluation was the identification of factors determining implementation success and is the basis for recommendations to optimize the effects of intervention through mentor mother support in family practice.

METHODS

STUDY DESIGN

We designed an observational implementation study that took place in the Netherlands from January 2011 to June 2012. The details of the study and the intervention are described in the study protocol published by Loeffen et al. (16)

During the study 35 eligible abused mothers were identified by 28 participating family physicians. Eight women were offered mentor mother support, but did not accept support because they preferred other help (n = 2), 2), or they denied the abuse and did not accept help (n = 6). Out of the 27 abused mothers who started, nine left the program preliminary because of the following reasons: 1) time restraints (n = 2), 2) other (professional) help (n = 2), 3) mentor mother support did not meet her expectations (n = 1) and 4) no clear reason (n = 4).

RESEARCH POPULATION AND DATA COLLECTION

We conducted semi-structured in depth interviews with family physicians, abused mothers and mentor mothers. The interview guide was developed based on literature and discussed in an expert panel (SLFW, FW, MLa, AL). The guide focused on the facilitators and barriers at each subsequent phase in the process the abused mother goes through as described below. All interviews were fully recorded, transcribed verbatim and processed using ATLAS.ti 7.

Family physicians

Originally we planned focus group discussions for participating family physicians (16). Due to difficulties in planning focus group sessions for family physicians we changed to individual interviews. We selected 12 family physicians by purposive sampling, regarding referring vs. non-referring, male vs. female and rural vs. urban family physicians, in order to pursue maximal diversity. Ten family physicians were interviewed by a research assistant (VP) and two were interviewed by a researcher (MLo).

Abused mothers

All 18 abused mothers who finished the program and signed an informed consent to be interviewed were invited for an interview six months after the start. The interviewer contacted them by phone and made an appointment for the interview at a place where they felt safe and comfortable. The interviews were performed by two trained research assistants (MS, HH). We succeeded to talk to 16 abused mothers (Table 1). Two abused mothers could not be reached after several attempts to contact them.

Mentor mothers

Of the eight mentor mothers who were employed and trained for the MeMoSA Nijmegen study, four completed their job during the project and participated in a focus group, facilitated by a research assistant (VP). Four mentor mothers quitted their job before the end of the project and three of them were interviewed individually (MLo). One mentor mother, who stopped preliminary, could not be reached.

DATA ANALYSIS

Two researchers (MLo, JD) analyzed the qualitative data from the interviews and focus group using the techniques of qualitative analysis e.g. independently coding the interviews and comparing and discussing codes with each other (16). If difference in coding a segment occurred, the two researchers reread the text and discussed until consensus was reached, if needed with the help of an independent third researcher (AL). Additional codes that emerged from the discussions were also applied to the previous coded transcripts. In the end, all transcripts were analyzed with the same codebook. Themes were constructed by grouping all codes into categories by the two researchers (ML and JD) who also coded the interviews. Finally these themes were discussed with the supervising committee (AL, SLFW, FW and MLa) and changed when needed.

RESULTS

In the analysis process we distinguished the following four subsequent phases the abused mother is going through: Phase of Identification, Phase of Referral, Phase of Acceptance and finally the Phase of Completion.

In every phase we found facilitators and barriers that influenced the implementation. Therefore we will describe our main themes into these four phases and present this schematic in Figure 1. The main results are illustrated by quotes (Table 2).

PHASE OF IDENTIFICATION

The family physicians' **attitude towards IPV** revealed some reluctance because they regard abused mothers as difficult patients. They expect abused mothers to take their own responsibility to break through the violent situation, in contrast to situations with battered children where they feel more responsible to intervene. Some family physicians doubt whether proactively discussing IPV is their task. Other family physicians mentioned that, although abuse is not permitted, an interaction between the partners leads to a violent situation, thereby indicating that both contribute to the abuse and therefore both have a responsibility to end this violent situation. Some family physicians could not

imagine this specific partner to be violent because they know him as a patient as well.

Furthermore, the family physicians expressed **fear of false accusation** leading to serious damage in the trust between family physician and abused mother or her partner, who often are both patients of the same family physician.

The family physicians' **high workload** is a hindering factor in identification of IPV. They mentioned that their time is too short to discuss delicate subjects such as IPV in particular. Abuse is considered a complex problem, with vague and diverse complaints, making it hard to recognize.

Finally, the family physicians suggested more and continuous **training** to improve their competences regarding identification and discussion of IPV.

PHASE OF REFERRAL

Family physicians valued the **direct availability** of the mentor mother, compared to professional support where waiting lists often exist.

The fact that mentor mothers offered **support at home** was also valued by all three groups of respondents. Family physicians and mentor mothers especially mentioned to get a better insight in the social context of the abused mother.

A barrier for referral is that some family physicians preferred professional help if they considered abused mothers' problems too complex. It mostly concerned psychiatric problems. Nevertheless, family physicians regard mentor mother support as a low threshold intervention, because the mentor mother functions as a '**paraprofessional friend**' (see phase of acceptance for more details) that is considered less threatening than a professional.

PHASE OF ACCEPTANCE

To accept mentor mother support, the abused mother needs to be **ready for change**, which was a recurring theme during the interviews with all respondents. Abused mothers first need to be aware of the abuse, have to be open to accept help and take action to get help, have to change and finally they have to maintain this new identity.

Acceptance of support by abused women was hindered by their **negative experiences**, as well as shame and guilt, leading to reduced help seeking behavior and skepticism towards support, especially professional support. A **trusting relationship** between family physician and abused mother was a prerequisite to accept support.

The most important facilitator for acceptance of mentor mother support was the fact that the mentor mother functioned as a '**paraprofessional friend**'. All parties appreciated the mentor mother as a nonjudgmental attentive listener, with the empathy and engagement of a friend on an equal level with the abused mother, whilst being an expert and keeping a professional distance.

PHASE OF COMPLETION

For the completion of support, a **trusting relationship** between abused mother and mentor mother was mentioned to be essential. Mentor mothers were mothers and sometimes experienced IPV themselves which made them experts by personal experience. The abused mothers felt well understood and facilitated completion of support. Additionally, abused mothers valued the open and interested attitude of mentor mothers and their friendliness and connectedness.

Care for children and work, of both the abused mother and mentor mother, made it sometimes difficult to meet every week and appeared to be a barrier to **continuity of care**. Also, **guidance and support for mentor mothers** during the mentor mother program was seen as valuable to manage frustrations and emotions that accompany their work with abused women.

DISCUSSION

MAIN FINDINGS

Firstly, we found that identification and discussion of abuse is hindered by family physicians' attitudes towards IPV. They question whether proactively discussing IPV is their job and often expect abused mothers to take personal responsibility in reporting IPV and asking for help. Family physicians often encounter a lot of resistance in their consultation of abused women and therefore consider them a difficult target group. Furthermore, they feel frustrated or powerless because they are unable to solve the problem of IPV. Other studies also describe these feelings of frustration, powerlessness and uncertainty, because healthcare providers are unable to 'fix' this complex problem (20-22). Besides, some family physicians doubt whether the perpetrator is to blame entirely and think the victim contributes to the violence as well. In other studies 'blaming the victim' is also described as a hindering attitude to identify IPV (23-25). As described in the theory of planned behavior the attitude is one of the factors that influence the intention or willingness to perform a given behavior (26). To change this attitude the perceived behavior of control, described as the confidence of a person in the ability to perform a given behavior, plays an important role. We think that training is necessary for family physicians to become more confident by learning how to cope with the problems of IPV (27). Family physicians are also part of society and will be influenced by cultural norms. Therefore we think it will not be sufficient to focus on the individual level alone, the attitude in society has to change as well.

Secondly, women's readiness for change is an important factor that hinders or facilitates identification of abuse and acceptance of mentor mother support. The readiness

or stages of change are based on the Transtheoretical Model of Health Behavior Change and are described for IPV (28). This model distinguishes five different stages that require a different approach. In the stage of precontemplation for instance, the abused mother has to become aware of the abuse by validating her experiences and reinforcing that IPV is unacceptable, whereas in the stage of action, interventions and strategies need to be evaluated. Understanding abused women's experiences and knowing that returning to an abusive partner is a well-known phenomenon, probably will help family physicians to take away feelings of frustration and powerlessness. Support will not be accepted if an abused woman is unaware of IPV or not ready for acceptance of help. Family physicians need to consider an abused woman's readiness for change to offer help that suits her stage of change. Therefore training of family physicians should also focus on recognizing an abused woman's readiness for change and teach them how to deal with it.

Thirdly, mentor mothers fulfill a unique role as paraprofessional friends in the acceptance and completion of support. When professionals are involved, mothers who are victims of IPV often fear losing their children, because professionals are mandated to report child abuse. With mentor mothers they get connected like a friend, which makes them less threatening than professionals. Mentor mothers provide moral support and understanding that is needed to empower female victims to actively change their abusive situation, especially in an early stage of change (12). By empowering abused women their wish to preserve autonomy can be met (29). Furthermore the bond between mentor mothers and victims probably leads to a proactive attitude that prevents preliminary termination of support.

Finally, professional guidance of the mentor mothers will enable them to deal with the emotional burden that accompanies working with abused women.

STRENGTHS AND LIMITATIONS

One of the limitations is that not all participating family physicians were interviewed. By purposive sampling we tried to select a variable group of family physicians to overcome this limitation. After interviewing twelve family physicians we reached data saturation. Besides, only abused mothers who completed mentor mother support were interviewed, while abused mothers who rejected or stopped mentor mother support preliminary, might have provided more insight in the barriers of implementation.

This study offers new insights that especially emphasize family physicians' attitudes towards IPV that hinder identification and discussion of abuse.

IMPLICATIONS FOR PRACTICE

First, we recommend more and continuous training of family physicians. The training should focus on their attitude and on recognizing the stages of change of an abused woman. Although we believe this will improve identification and discussion of abuse, we also argue for changes at the level of society.

Second, broader embedding of low threshold support in primary care should be considered to increase acceptance for help.

The authors strongly recommend further development of low threshold interventions that are more easily available, and less threatening than professional support.

CONCLUSION

Identification and discussion of abuse by family physicians are hindered by their attitudes towards IPV. Abused women are considered as a difficult target group that has an own responsibility to break through the violent situation. To change this attitude we recommend more training. The attitudes in society have to change as well. Although we think that family physicians play an important role in support for abused women, they will not be able to solve this complex problem alone. Broader embedding of low threshold support is therefore required, involving other healthcare providers as well. Mentor mothers can fulfill a unique and complementary role by being paraprofessional friends that are more equal like a friend, but also have professional expertise to offer adequate support.

REFERENCES

1. Garcia-Moreno C, Jansen HA, Ellsberg M, Heise L, Watts CH, Health WHOM-cSoWs, et al. Prevalence of intimate partner violence: findings from the WHO multi-country study on women's health and domestic violence. *Lancet*. 2006;368(9543):1260-9. Epub 2006/10/10.
2. Krug EG, Dahlberg LL, Mercy JA, Zwi AB, Lozano R. World report on Violence and Health. World Health Organization. Geneva 2002.
3. Campbell J, Jones AS, Dienemann J, Kub J, Schollenberger J, O'Campo P, et al. Intimate partner violence and physical health consequences. *Archives of internal medicine*. 2002;162(10):1157-63. Epub 2002/05/22.
4. Holt S, Buckley H, Whelan S. The impact of exposure to domestic violence on children and young people: a review of the literature. *Child abuse & neglect*. 2008;32(8):797-810. Epub 2008/08/30.
5. Chen PH, Jacobs A, Rovi SL. Intimate partner violence: childhood exposure to domestic violence. *FP Essentials*. 2013;412:24-7.
6. Prosmán GJ, Lo Fo Wong SH, Bulte E, Lagro-Janssen AL. Healthcare utilization by abused women: a case control study. *The European journal of general practice*. 2012;18(2):107-13. Epub 2012/04/24.
7. Richardson J CJ, Petruckevitch A, Chung WS, Moorey S, Feder G. Identifying domestic violence: cross sectional survey of women attending general practice. *British Medical Journal*. 2002;324:274-80.
8. Hegarty KL, Bush R. Prevalence and associations of partner abuse in women attending general practice: a cross-sectional survey. *Australian and New-Zealand Journal of Public Health*. 2002;26(5):437-42.
9. Lokhmatkina NV, Kuznetsova OY, Feder GS. Prevalence and associations of partner abuse in women attending Russian general practice. *Family practice*. 2010;27(6):625-31. Epub 2010/07/02.
10. Prosmán GJ, Jansen SJ, Lo Fo Wong SH, Lagro-Janssen AL. Prevalence of intimate partner violence among migrant and native women attending general practice and the association between intimate partner violence and depression. *Family practice*. 2011;28(3):267-71. Epub 2011/01/18.
11. Ramsay J, Richardson J, Carter YH, Davidson LL, Feder G. Should health professionals screen women for domestic violence? Systematic review. *British Medical Journal (Clinical research ed)*. 2002;325(7359):314. Epub 2002/08/10.
12. Prosmán GJ, Lo Fo Wong SH, Lagro-Janssen AL. Why abused women do not seek professional help: a qualitative study. *Scandinavian journal of caring sciences*. 2014;28(1):3-11. Epub 2013/01/29.
13. Hegarty KL, Taft AJ. Overcoming the barriers to disclosure and inquiry of partner abuse for women attending general practice. *Australian and New Zealand journal of public health*. 2001;25(5):433-7. Epub 2001/11/02.
14. Lo Fo Wong SH, Wester F, Mol SSL, Lagro-Janssen AL. Increased awareness of intimate partner abuse after training: a randomised controlled trial. *British Journal of General Practice*. 2006;56:249-57.
15. Taft AJ, Small R, Hegarty KL, Watson LF, Gold L, Lumley JA. Mothers' AdvocateS In the Community (MOSAIC)--non-professional mentor support to reduce intimate partner

- violence and depression in mothers: a cluster randomised trial in primary care. *BMC public health*. 2011;11:178. Epub 2011/03/25.
16. Loeffen MJ, Lo Fo Wong SH, Wester FP, Laurant MG, Lagro-Janssen AL. Implementing mentor mothers in family practice to support abused mothers: study protocol. *BMC family practice*. 2011;12:113. Epub 2011/10/20.
 17. Prosman GJ, Lo Fo Wong SH, Lagro-Janssen AL. Support by trained mentor mothers for abused women: a promising intervention in primary care. *Family practice*. 2013. Epub 2013/10/18.
 18. Prosman GJ, Lo Fo Wong SH, Romkens R, Lagro-Janssen AL. 'I am stronger, I'm no longer afraid...', an evaluation of a home-visiting mentor mother support programme for abused women in primary care. *Scandinavian journal of caring sciences*. 2013. Epub 2013/11/21.
 19. Strauss A, Corbin J. *Basics of Qualitative Research; Techniques and procedures for developing grounded theory*. London: Sage publications; 1998.
 20. Lo Fo Wong SH, De Jonge A, Wester F, Mol SS, Romkens RR, Lagro-Janssen T. Discussing partner abuse: does doctor's gender really matter? *Family practice*. 2006;23(5):578-86. Epub 2006/04/06.
 21. Lo Fo Wong S, Wester F, Mol S, Lagro-Janssen T. "I am not frustrated anymore". Family doctors' evaluation of a comprehensive training on partner abuse. *Patient education and counseling*. 2007;66(2):129-37. Epub 2007/02/24.
 22. Williston CJ, Lafreniere KD. "Holy cow, does that ever open up a can of worms": health care providers' experiences of inquiring about intimate partner violence. *Health care for women international*. 2013;34(9):814-31. Epub 2013/06/25.
 23. Sugg NK, Thompson RS, Thompson DC, Maiuro R, Rivara FP. Domestic violence and primary care. Attitudes, practices, and beliefs. *Archives of family medicine*. 1999;8(4):301-6. Epub 1999/07/27.
 24. Eastaerl PW, Eastaerl S. Attitudes and practices of doctors toward spouse assault victims: an Australian study. *Violence and victims*. 1992;7(3):217-28. Epub 1992/01/01.
 25. Garimella R, Plichta SB, Houseman C, Garzon L. Physician beliefs about victims of spouse abuse and about the physician role. *Journal of women's health & gender-based medicine*. 2000;9(4):405-11. Epub 2000/06/27.
 26. Ajzen I. The theory of planned behavior. *Organizational Behavior and Human Decision Processes*. 1991;50(2):179-211.
 27. Lo Fo Wong S, Wester F, Mol SS, Lagro-Janssen TL. Increased awareness of intimate partner abuse after training: a randomised controlled trial. *The British journal of general practice : the journal of the Royal College of General Practitioners*. 2006;56(525):249-57.
 28. Reisenhofer S, Taft A. Women's journey to safety - the Transtheoretical model in clinical practice when working with women experiencing Intimate Partner Violence: a scientific review and clinical guidance. *Patient education and counseling*. 2013;93(3):536-48.
 29. Chang JC, Cluss PA, Ranieri L, Hawker L, Buranosky R, Dado D, et al. Health care interventions for intimate partner violence: what women want. *Women's health issues : official publication of the Jacobs Institute of Women's Health*. 2005;15(1):21-30.

TABLES & FIGURES

Table 1 Characteristics of abused mothers (n = 16)

Age category (years)	n (%)
18-25	3 (19%)
26-35	3 (19%)
36-45	5 (31%)
46-55	5 (31%)
Country of origin	
Netherlands	11 (69%)
Turkey	1 (6%)
Antilles	2 (13%)
Morocco	2 (13%)
Number of children	
1	7 (44%)
2	4 (25%)
3	4 (25%)
4	1 (6%)
Living situation	
With partner and child(ren)	8 (50%)
With children	6 (38%)
Other	2 (13%)
Education level*	
Low	5 (31%)
Middle	7 (44%)
High	4 (25%)

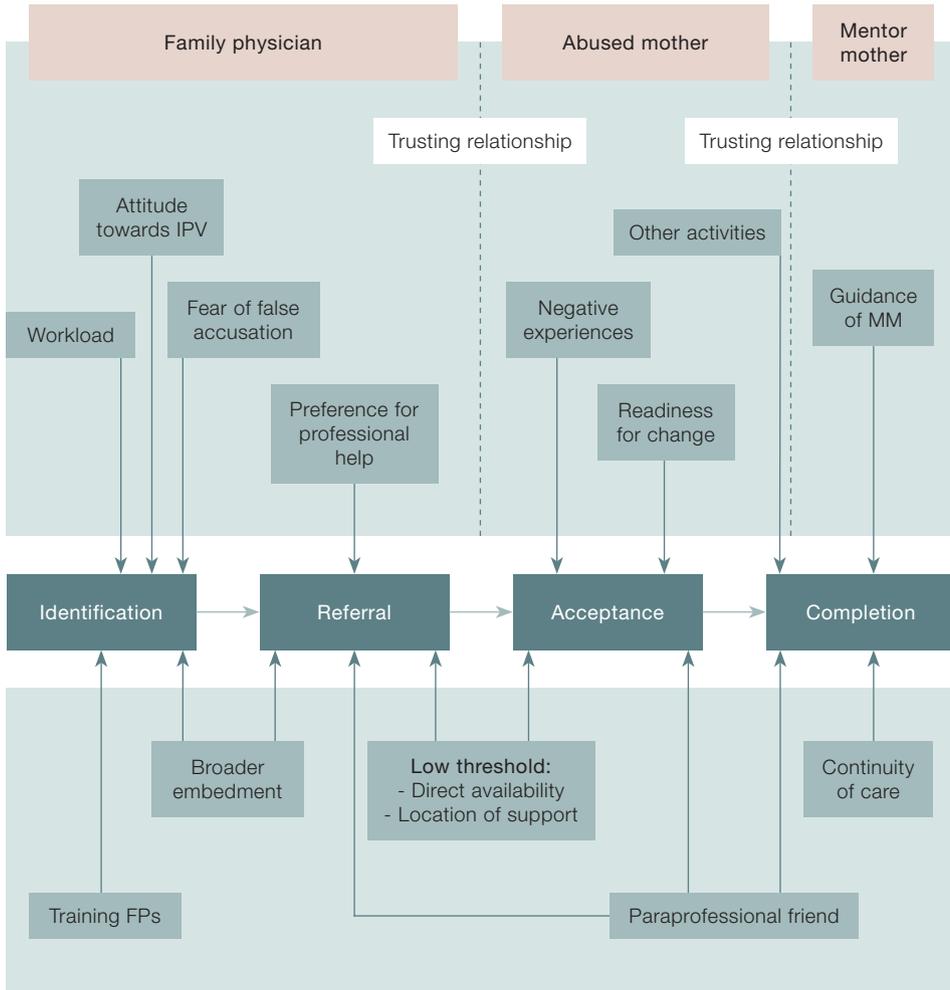
* Education level, low: no school/primary school/lower vocational education, middle: middle vocational education/ higher general secondary education/ pre-university secondary education, high: / higher vocational education / university

Table 2 Quotes to illustrate the results

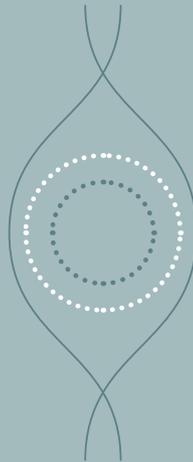
Phase of identification	Attitude towards IPV
	<p>[The interviewer asks the family physician why she decided to participate in the study] (...) <i>to improve patient care and I thought it is something new, that you have to try some things. Although I am skeptical about it, because I know from my experience that these people withdraw from all interventions and don't want anyone to meddle in. It's a difficult target group.</i> [family physician, female, age 59]</p>
	<p><i>Sometimes I ask myself, honestly, does it all belong to the family physician's task, do we have to do it all, inquire and feel inadequate if she does not disclose the abuse (...) they can ask me for anything, but the patient has to take some initiative as well.</i> [family physician, female, age 59]</p>
	<p><i>Sometimes it is unclear whether the man is the perpetrator, (...) it's difficult to assess where the problem is located. Yes, violence is not allowed, that much is clear, but I know these families where both of them are aggressive.</i> [family physician, female, age 46]</p>
	<p><i>Generally I try to make another appointment, so it's not that is over yet. You have to push a little bit, (...) that is a little bit my style, I think that's why I attract it, that I see it a lot, that's just the way it works.</i> [family physician, female, age 36]</p>
	<p>Fear of false accusation</p> <p><i>Of course you have to discuss that one verbally or physically threatens the other and sometimes you have to raise the issue yourself, because you see it happens. I think that it's the feeling that you are going to lose the contact with one of the two patients.</i> [family physician, male, age 53]</p>
	<p>High workload</p> <p><i>Your own time pressure, that you don't always want or have the time to, that you just focus on the complaint (...) sometimes your hands are full on the somatic part.</i> [family physician, female, age 57]</p>
	<p>Home visiting</p> <p><i>Observations of the mentor mother; what does the house look like, is it clean, how the mother interacts with the children, these are very important things that give a lot of information.</i> [family physician, male, age 58]</p>

Phase of referral	Professional friend
	<p>[Family physician describes the mentor mother as someone] <i>who stands beside the patient instead of above (..) more equal, not someone they have to look up to or for whom they have to keep up appearances.</i> [family physician, female, age 59]</p>
Phase of acceptance	Readiness for change
	<p><i>I have the feeling that it's also a process of growth for people, it has to grow, they have to become aware that it's not normal (...) that violence is not allowed.</i> [family physician, male, age 53]</p>
	Negative experiences
	<p><i>I also told my doctor, I don't want to go to a psychologist or psychiatrist, which gives me the feeling to talk to a wall.</i> [abused mother, age 30]</p>
	Trusting relationship family physician – abused mother
	<p><i>In the beginning I was a bit skeptical, but because I have a lot of confidence in my family physician I thought let's give it a try.</i> [abused mother, age 49]</p>
	Professional friend
	<p><i>It was just a friend [mentor mother], but also with more expertise. I considered her more as a kind of family physician you go to for talking, or in some situations as a friend coming to visit you (..) you could ask more advice than with a friend.</i> [abused mother, age 30]</p>
Phase of completion	Trusting relationship abused mother and mentor mother
	<p><i>We [abused mother and mentor mother] had a great click so to speak especially as humans, that was most important (...) it was every week an hour, just an hour that I thought that's where I can tell my story and it really was one hour for me, that made me feel better.</i> [abused mother, age 45]</p>
	Continuity of care
	<p><i>In the beginning I thought leave me [abused mother] alone, it is not that way, but she [mentor mother] was very persistent. She said: "You think it goes well now, but wait and see, I have to continue making appointments with you."</i> [abused mother, age 39]</p>
	Guidance and support for mentor mothers
	<p><i>In our team meetings we always had a very tight schedule and there was no time to talk about my feelings.</i> [mentor mother, age 32]</p>

Figure 1 Overview of main themes



CHAPTER 6
PROCESS EVALUATION:
AN APPROPRIATE METHOD
TO MEASURE THE EFFECT OF
MENTOR MOTHER SUPPORT
FOR ABUSED MOTHERS



Maartje Loeffen
Sylvie Lo Fo Wong
Fred Wester
Antoine Lagro-Janssen

Submitted

ABSTRACT

OBJECTIVE Evaluate effects of mentor mother support among abused mothers.

METHODS We conducted an intervention study by combining a quantitative analysis with a qualitative process evaluation. In the quantitative analysis we used T-test matched pairs to investigate significant differences between pre- and post-test concerning the questionnaires on IPV, depressive symptoms and parenting stress. General practitioners identified and included abused mothers in the study by referring them to mentor mother support. We used validated questionnaires to measure intimate partner violence (IPV), depressive symptoms and parenting stress, and report forms for social support and acceptance of professional help. Process outcomes were successive changes of the personal goals abused women formulated in the domains violence, mental health, parenting, social support and daytime activities, described in report forms and plans.

RESULTS Twenty seven women accepted mentor mother support. Quantitative outcomes showed no significant differences between pre and post IPV ($p = 0.91$), depressive symptoms ($p = 0.06$), and parenting stress ($p = 0.99$). Women who completed the support programme showed a positive change in their social support networks and acceptance of professional help. The process evaluation showed that virtually all personal goals were achieved.

CONCLUSION By focusing on women's personal goals, mentor mothers offer support that meets their stage of change. To measure the effect of such a tailored intervention a process evaluation is a more appropriate method than standardized questionnaires.

PRACTICE IMPLICATIONS We recommend using a process evaluation to measure the effectiveness of IPV interventions.

Keywords

intimate partner violence intervention; abused women; general practice; individualized care; stages of change; effectiveness; process evaluation; qualitative research.

INTRODUCTION

Violence between partners causes both physical and mental problems in the victims, and it is of the utmost importance to develop interventions that can stop such violence and control the damage. (1, 2) The mentor mother support scheme, which has been developed in mother and child healthcare in Australia and adapted for use in general practice in the Netherlands, is such an intervention. (3-6) Mentor mothers are paraprofessionals with at least intermediate vocational education: non-professionals who have been trained to guide mothers who are victims of Intimate Partner Violence (IPV). For a four month period, support takes place on a weekly basis either at the victims' home or at another location where the mothers feel safe and at ease. Mentor mothers provide non-judgmental active listening and support, develop a trusting relationship with the abused woman in order to empower her to make the decisions which are in agreement with her needs and wishes. The intervention aims to diminish violence and depressive symptoms, to improve mother-child relationships, to extend social support networks and to improve acceptance of professional mental support for mothers and children.

Worldwide, several interventions have been developed and tested for feasibility and effectiveness. The systematic review by Bair Merrit et al. (2014), reviewing the effectiveness of IPV interventions in primary healthcare, mentions various studies that have used violence, health, safety-promoting behaviour and referral to other care providers as outcome measures. (7) Though some positive effects were certainly found for these outcome measures, the interventions did not always prove to have a positive effect or not for all outcome measures. The question is whether this actually means that the intervention was not effective or that important changes were not observed due to the chosen method and outcome measures. Effect studies make use of standardized questionnaires to determine intervention effects quantitatively, such as violence and depressive symptoms. In order to determine what changes occur while the intervention is ongoing, process evaluation is vital. It is well-known that women who are victims of IPV go through a process that consists of several stages of change, starting with a stage of awareness raising and ending with a stage of behavioural change and consolidation of the new situation, which may involve help seeking and relationship break-up. (8) As this process often tends to be prolonged and commonly involves regression to previous stages, a quick change during or after an intervention should not be expected to occur. To be able to measure important changes in this process nonetheless, we should be using outcome measures that more closely match the process victims of IPV go through.

In our study (MeMoSa Nijmegen), we have measured the effect of mentor mother support using the commonly used quantitative outcome measures of violence, depressive

symptoms, mother-child relationships, social support networks and the acceptance of professional support for mothers and children. (6) MeMoSa Nijmegen primarily focused on the implementation of mentor mother support in general practice, and collected process information that had been accurately recorded by the mentor mothers in intake and progress reports.

Besides exploring the effects of mentor mother support on quantitative outcomes our study also aims to evaluate the process of mentor mother support in order to improve our understanding of the changes the intervention brings forward. Such process information should provide a better match with the prolonged process that female victims of IPV often go through.

METHODS

STUDY DESIGN

We conducted an intervention study with mixed methods combining quantitative research with pre- and post-tests and a qualitative process evaluation.

PARTICIPANTS

Abused mothers with children living at home who visited their general practitioner (GP) who identified them as being abused, were included in our study and referred to a mentor mother, if they agreed with this referral. Exclusion criteria were: acute threats of safety, or serious physical problems that need hospitalization or psychiatric problems including major psychiatry like psychosis and schizophrenia. Seriousness of physical or psychiatric problems were determined by the general practitioner of the abused woman.

Eight mentor mothers received ten days of training to learn how to support abused mothers. After the training, they received coaching every 2-4 weeks and met other mentor mothers to discuss the content of their support and the problems they encountered. The mentor mothers were trained and coached by a mentor coordinator, a social worker with training experience who worked at the network of the local abused women's support and shelter organization.

PROCEDURE

Between September 2009 and January 2011, a total of 114 GPs, located in Nijmegen in the Netherlands and its vicinity, received training in recognizing and discussing IPV. These trained GPs and their colleagues working in the same general practice were invited for participation in our MeMoSA study. Finally, 87 GPs from 33 general practices, care for 110.000 patients, signed up to participate. Participating GPs referred eligible abused

mothers for our study. Women who accepted mentor mother support had to fill in an informed consent form, in which they agreed with receiving weekly mentor mother support, and filling in a questionnaire twice at the start of the intervention ($t = 0$) and six months after the start of the intervention ($t = 1$).

At the start of mentor mother support, women indicated several personal goals that were evaluated and recorded after every meeting between a woman and her mentor mother.

OUTCOME MEASURES

Quantitative measures

Intimate partner violence. IPV was measured by the Composite Abuse Scale (CAS) (9) at the start as well as six months after the start of mentor mother support. This questionnaire was validated for measuring the presence, severity, and type of IPV.

Depression. Depressive symptoms of the mother were measured by a part of the Symptom Checklist (SCL-90) (10) at the start as well as six months after the start of mentor mother support. This questionnaire measures physical and mental health complaints, such as depressive symptoms like anhedonia, loss of appetite and sleeping problems.

Parenting stress. Parenting stress was measured using the NOSIK (11) at the start as well as six months after the start of mentor mother support. This structured questionnaire is the Dutch translation of the Parenting Stress Index Short Form (PSI-SF) (12) and measures a parent's experience of stress with raising a child.

Social support. Social support was measured by report forms completed by the mentor mothers after every visit. We defined social support as improved if a positive change occurred in one of the four following domains: the employment situation; education; social activities; or the social network.

Acceptance of professional help for mothers and children. Acceptance of professional mental help for mother and children was measured by report forms filled in by the mentor mothers after every visit. We defined acceptance of professional mental help for the mother as a positive change if a professional mental healthcare provider was visited at least twice during or after mentor mother support. Acceptance of professional mental help for children was defined as a positive change if child protective services were asked for help, or mental healthcare for the child, or participation in a youth support programme for mother and child was accepted.

Process evaluation

To evaluate the process of achieving personal goals, the intervention used plans and report forms that were to be completed by the mentor mothers after every visit. With the

aid of the mentor mother, each abused woman established her personal goals and they were documented in a plan, drafted in the second meeting. Women's plans comprised the personal goals and action plan in the following five domains: violence, mental health, parenting, social support and daytime activities. During each meeting with the victim, goals were evaluated together, and recorded in the report form and discussed with the mentor coordinator and the other mentor mothers.

DATA ANALYSIS

Quantitative analysis

Quantitative data from the questionnaires (CAS, SCL-90, and NOSIK) have been analyzed with descriptive statistics in SPSS 16.0. Incomplete questionnaires were not included in our quantitative analysis. T-test matched pairs were used to test outcome measures for significant differences between pre- and post-test. We considered a p-value of less than 0.05 significant.

To analyse if social support and acceptance of professional help for mother and her child(ren) improved, we used the report forms filled out by the mentor mother after every visit.

Process evaluation

We performed a process evaluation by a document analysis of the weekly report forms, describing for each domain: the abused mother's personal goals; her action plan; the actual results that were obtained. So for every abused mother that participated in our study (n = 21) about 16 report forms were analysed. In total we analysed 314 report forms.

One researcher (ML) read all the plans and report forms and established a topic list for each domain to describe the personal goals, action plan and results that were obtained. This topic list was discussed with the supervising committee (AL, SLFW and FW) and after minor adjustments consensus was reached.

RESULTS

PARTICIPANTS

During our study, 27 abused women were referred to the mentor mother support intervention. Six of the 27 abused mothers dropped out, because they eventually did not receive mentor mother support (n = 2), the personal goal had already been obtained before the plan was drafted (n = 1) or mentor mother support had already been terminated before the plan could be drafted (n = 3). This left 21 abused mothers with a mean age of 37,6 years (range between 24-56 years).

For seven participants the CAS was not filled out (completely), resulting in data about intimate partner violence of 14 mothers. The SCL-90 was not filled out (completely) by six of these mothers, resulting in data about depression of 15 mothers. Data about parenting stress were missing for seven participants, so 14 mothers did fill out the NOSIK. (Figure A.1)

QUANTITATIVE OUTCOMES

We found no significant differences between IPV ($p = 0.91$), depressive symptoms ($p = 0.06$) and parenting stress ($p = 0.99$) before and after mentor mother support (Table A.1).

In 39 percent ($n = 7$) of the women who completed the entire support programme ($n = 18$), a positive change occurred in their social support networks.

A positive effect on the acceptance of professional help for the mother occurred in 50 percent ($n = 9$) of the women who completed the entire support programme. Thirty-nine percent ($n = 7$) of the mothers who completed the entire support programme, accepted professional help for their child(ren).

PROCESS EVALUATION: PERSONAL GOALS, ACTION PLAN AND SUCCESS PER DOMAIN

Below we will describe in detail the content of the personal goals, action plans and if the abused women were successful in the accomplishment of their personal goals. For four women their action plan and / or success of personal goal achievement was unclear, because they preliminary stopped the mentor mother support programme. Table A.2 offers an overview per domain of the number of women who formulated a personal goal, adhered to their action plan and successfully attained their goal.

Violence ($n = 17$)

Seventeen of the 21 women who drafted a plan had a personal goal in the violence domain. These goals proved to be related to the stage of their relationship. Those in a violent relationship were either seeking a non-violent and safe situation or considering relationship break-up if the violence persisted. Other women, whose relationship already had been ended, were focusing on independence and the definitive severing of all contact with their ex-partner. The four women who did not mention any goals in the violence domain, already left their violent partner or experienced no actual IPV. They focused on the other domains, such as mental health, social support, and daytime activities.

Most of the women who formulated a personal goal ($n = 17$) in the violence domain followed their action plan ($n = 14$). Of these, 12 women achieved their goal fully or at least partially. The approach of the mentor mother depended on the personal goal of the abused woman. They focused on improving the women's relationships by learning

them what they could do in dialogue to prevent escalation of disagreement or a fight between (ex-) partners and set boundaries. Other abused women were assisted in severing all relations with their ex-partners either by making an escape plan and escaping or by seeking safety-oriented professional help, such as police or shelter services.

Women achieving their personal goal, generally succeeded in ceased or diminished violence, or severing of their relationship or contacts with their ex-partner. In some cases, achieving the goal of stopping the violence implied relationship break-up.

Mental health (n = 12)

Although almost all women (n = 20) experienced mental health problems, nine women did not formulate a personal goal in this domain. Six women already had professional help from a general practitioner or a psychologist, the other women (n = 3) decided to focus on other goals like making the decision to stay or leave the violent relationship. Only one woman mentioned not having any mental health problems.

For the women who did set personal goals in the mental health domain (n = 12), the following goals can be distinguished: to decrease anxiety and depressive symptoms, to increase self-confidence, and to improve sleep. Improved mental health was important in the plans of mothers after their violent relationship had ended. Improved self-confidence was especially mentioned by women who were still caught up in a relationship.

Nine of the twelve women, who formulated a personal goal in the mental health domain, adhered to their action plan and successfully achieved their goal. One woman was not ready to commit to the demands of psychological treatment and therefore failed to follow the action plan in order to achieve her goal. The action plans in the personal goal of improving self-confidence entailed changing the women's own cognitions or engaging in activities that boosted self-confidence, such as enrolling in a training programme. Other approaches in the mental health domain included doing relaxing activities, discontinuing or starting up medication, psychoeducation by the mentor mother and visiting a psychologist. The professional help of a psychologist was called in for depressive symptoms. The mentor mothers lent a sympathetic ear and offered support in widening the women's social network and activities.

Women, who successfully achieved their goals, had improved self-confidence, decreased anxiety and depressive symptoms, and improved sleep.

Parenting (n = 9)

The plans and report forms showed that parental violence often causes behavioural problems in the children, but not always resulted in formulating goals in the parenting

domain. Twelve women did not formulate a personal goal in this domain. Most of these women were aware of the negative consequences of the violence on their children, but focused on goals like ending the relationship, thereby hopefully stopping the violence and creating a better situation for their children. Other women already had professional help, like youth care. Only a few did not experience parenting problems at all. The formulated goals in the parenting domain included seeking professional help for the children, learning to become less protective, and handle the children's problem behaviour, such as anger, inability to express emotions and problems at school. Improving the child's mental well-being was once mentioned as a goal.

In all cases (n = 9), the personal goals in the parenting domain were obtained. In learning to cope with children's problem behaviour, parenting skills were introduced and discussed by the mentor mothers, as on how to provide a clear structure or set boundaries to their children. Women were encouraged to undertake activities with their children. In some cases, it was decided to inform the teacher or to refer mothers to a professional, such as a school youth care worker or a psychologist.

These action plans resulted in improvement of the mothers' parenting skills, decrease of the children's problem behaviour and improvement of their school results, and the children's referral to youth care professionals.

Social support (n = 11)

The personal goals of those women whose social network was limited or lacking, consisted of extending the network and improving the support (n = 11). Women who did not formulate goals (n = 10) in the social support domain, mainly were satisfied with their social network and the support they received. Only one woman experienced problems in this domain, but decided to focus on her process to stay in or break up her relationship.

Ten of the 11 women who set a personal goal in the social support domain followed their action plan and achieved their goal (partially). One woman, although she adhered to her action plan, failed to achieve her goal, because she still did not feel understood by her family.

The women were encouraged to widen their social network by strengthening their ties with existing contacts or entering into new ones. The mentor mothers played a part by mapping out the existing network, stimulating mothers to seek help, and motivating them to go outside in order to breakthrough social isolation.

The women's social networks were not always widened, but the goal that had been set and the approach that had been chosen, did often generate social support within their existing network as well as an increased number of activities.

Daytime activities (n = 13)

The female victims of IPV needed, but often lacked, a stable structure of daily activities. Many women had neither a job nor proper training. They meant to change the chaotic situation in which they found themselves by creating a stable daytime structure and often aimed to enrol in a training programme, find work, and engage in new activities or revive old ones (n = 13). Half of the eight women who did not formulate a personal goal in this domain already had a job or followed an education programme. The other women without personal goals in this domain, were in a situation that required all their attention, like deciding to stay in or break up their relationship or were enrolled in a psychological treatment programme.

Ten out of 13 women adhered to their action plan and achieved their personal goal (partially). The action plans focused mainly on enrolment in a course or training programme and on employment orientation and job applications. A regime of sports, like yoga and running, and social activities also helps to provide structure to the day.

The goals of providing a clear structure to the day and engaging in (new) activities were achieved in all cases. Finding a job and enrolling in a training programme was not always attainable within the four month guidance programme, but did set the women on a course towards employment orientation and job applications. One woman divorced and decided to move to her family abroad and therefore her action plan and personal goals (learn Dutch, find a job in the Netherlands) did not apply to her anymore.

DISCUSSION AND CONCLUSION

DISCUSSION

Our process evaluation has demonstrated that important changes did indeed occur during mentor mother support for the largest part of the abused mothers who completed the whole programme. Whereas our quantitative analysis of the effect on IPV, depressive symptoms and parenting stress failed to show any significant change. Other effect studies using questionnaire-based quantitative analyses also often failed to find significant changes. (7) This confirms our hypothesis that process evaluation is more suited to the process of change which female victims of IPV go through.

Our process evaluation shows that the content of the women's personal goals coincides with the stage of their relationship. This is particularly apparent in the violence domain, in which we can distinguish three groups: women in a relationship, whose goal it is to see the violence cease or diminish; women who are in doubt, who wish to make up their minds about staying in or getting out of the relationship; and women who have terminated their relationship, who want to reinforce their independence by severing all

contact with their ex-partner. In contrast to the violence domain, that is more pertinent to women who remain in a relationship than to women who have terminated their relationship, other domains, such as the mothers' and children's mental health, appear to be always an area for special attention as the experience of IPV has long-term consequences.

Virtually all goals that had been formulated in the support plans were actually attained. We assume that the tailored support by mentor mothers and the process evaluation of tailored outcomes are pivotal. By focusing on the personal goals of women, mentor mothers offer person centred care that take women's specific needs into account. The importance of individualized care is also described in other studies on IPV interventions. (13-15) Furthermore, women in a violent situation often experience feelings of powerlessness. By encouraging them to formulate their own goals, they regain a sense of control over important life decisions. (16)

To be able to ascertain whether these personal goals are attained in point of fact, it is essential not to use standardized outcome measures, as is commonly done in effect studies. In women who have managed to break out of the violence situation, for instance, change with regard to violence may not be evident, whereas other changes, such as less emotional dependency on their ex-partner, may actually occur. Monitoring changes in the women's personal goals allows us to measure important changes and, hence, the effect of mentor mother support. Some goals did not have led to the desired result within the four month mentor mother support term, particularly the goals of enrolling in training and finding a job. The four month duration of the intervention and follow-up will possibly play a part in this. It may be unrealistic to expect a four month intervention to induce changes such as starting education and finding a new workplace. What our method makes clear, however, is that changes do indeed occur in the process abused mothers are going through, but that they only become discernible by exploring woman's individual process. In order to be able to ascertain such progress, a longer follow-up is needed. This should also demonstrate whether goals that have been achieved are sustainable. Women who are victimised often show regression to previous stages (8), such as when they get back together with their ex-partners or when the violence increases.

The main weakness of our study is the number of participants ($n = 27$), and a relatively large share of these women ($n = 9$) who dropped out before the intervention came to an end. Attrition is a notorious problem in this hard-to-reach population and only can be diminished by laborious strategies such as multiple contacts sources with study participants. (17, 18)

Another limitation is the short follow-up period, which is not suitable to establish long-term effects and sustainable results. As IPV is often a long-drawn-out predicament

with long-term consequences, one may expect it to take more time for any clear change to be measurable. Making use of report forms and monitoring the women's personal goals allow observing smaller changes or effects that occur in the short term.

A limitation occurred in the use of the CAS because this questionnaire measures violence in the past year in an overlap period, at the start of mentor mother support and 6 months later. This may also have prevented finding a violence effect.

The main strength of our study lies in the qualitative laborious method we used, consisting of a document analysis of the report forms of 21 abused mothers during four months of mentor mother support.

CONCLUSION

Female victims of IPV are in different stages of their relationship, involving different needs. The mentor mother support intervention meets these needs by focusing on the women's personal goals. To be able to measure the effects of such a tailored intervention, outcomes also must be tailored. Process evaluation, we believe, provides a better match with the process female victims of IPV are going through than commonly used standardized questionnaires.

PRACTICE IMPLICATIONS

To measure the effectiveness of IPV interventions, we recommend process evaluation, using tailored outcome measures rather than the commonly used standardized questionnaires. Our study shows once more that the personal goals of female victims of IPV depend on their personal situation and process of change. To attune the action plan to the stage concerned, it is important to offer a personalized intervention targeting a woman's personal goals. A tailored intervention pursuing personal goals requires a tailored outcome to match.

To be able to measure long-term effects as well, it would be efficacious in future studies of IPV interventions to extend the follow-up and establish a cohort study to be able to evaluate long term effects of the intervention. This would also allow researchers to demonstrate whether goals that have been achieved are actually sustainable.

CONFLICTS OF INTEREST

None.

AUTHORS' CONTRIBUTION

All authors have materially participated in the research: SLFW, ALJ and ML are responsible for the design of the study. ML performed the analysis and wrote the first draft of the manuscript. SLFW, FW and ALJ critically revised the manuscript. All authors read and approved the final article.

FUNDING

The project is funded by municipality of Nijmegen (the Netherlands) and ZonMw (the Netherlands).

ACKNOWLEDGEMENTS

The authors would like to thank all general practitioners and abused mothers who participated in our study, Rikkert Stuve for providing language help and Jasper Daemen, medical student, for his help in analyzing the quantitative data.

REFERENCES

1. Campbell JC. Health consequences of intimate partner violence. *Lancet*. 359 (2002) 1331-36.
2. Ellsberg M, Jansen HA, Heise L, Watts CH, Garcia-Moreno C, Health WHOM-cSoWs, et al. Intimate partner violence and women's physical and mental health in the WHO multi-country study on women's health and domestic violence: an observational study. *Lancet*. 371 (2008) 1165-72.
3. Taft AJ, Small R, Hegarty KL, Watson LF, Gold L, Lumley JA. Mothers' AdvocateS In the Community (MOSAIC)--non-professional mentor support to reduce intimate partner violence and depression in mothers: a cluster randomised trial in primary care. *BMC public health*. 11 (2011) 178.
4. Prosmán GJ, Lo Fo Wong SH, Romkens R, Lagro-Janssen AL. 'I am stronger, I'm no longer afraid...', an evaluation of a home-visiting mentor mother support programme for abused women in primary care. *Scandinavian journal of caring sciences*. 28 (2013) 724-31.
5. Prosmán GJ, Lo Fo Wong SH, Lagro-Janssen AL. Support by trained mentor mothers for abused women: a promising intervention in primary care. *Family practice*. 31 (2014) 71-80.
6. Loeffen MJ, Lo Fo Wong SH, Wester FP, Laurant MG, Lagro-Janssen AL. Implementing mentor mothers in family practice to support abused mothers: study protocol. *BMC family practice*. 12 (2011) 113.
7. Bair-Merritt MH, Lewis-O'Connor A, Goel S, Amato P, Ismailji T, Jelley M, et al. Primary care-based interventions for intimate partner violence: a systematic review. *American journal of preventive medicine*. 46 (2014) 188-94.
8. Reisenhofer S, Taft A. Women's journey to safety - the Transtheoretical model in clinical practice when working with women experiencing Intimate Partner Violence: a scientific review and clinical guidance. *Patient education and counseling*. 93 (2013) 536-48.
9. Hegarty K, Fracgp, Bush R, Sheehan M. The composite abuse scale: further development and assessment of reliability and validity of a multidimensional partner abuse measure in clinical settings. *Violence and victims*. 20 (2005) 529-47.
10. Arindell W.A. EJHM. SCL-90 Handleiding bij een multidimensionele psychopathologie indicator [SCL-90 Guide for a multidimensional psychopathology indicator]. Lisse: 2009.
11. De Brock A.J.L.L. VAA, Gerris J.R.M., Abidin R.R. NOSIK handleiding experimentele versie [NOSIK guide experimental version]. Amsterdam 1992.
12. Haskett ME, Ahern LS, Ward CS, Allaire JC. Factor structure and validity of the parenting stress index-short form. *Journal of clinical child and adolescent psychology : the official journal for the Society of Clinical Child and Adolescent Psychology*, American Psychological Association, Division 53. 35 (2006) 302-12.
13. Kulkarni SJ, Bell H, Rhodes DM. Back to basics: essential qualities of services for survivors of intimate partner violence. *Violence Against Women*. 18 (2012) 85-101.
14. Davies JM, Lyons, E., & Monti-Catania, D. Safety planning with battered women: Complex lives/difficult choices. Thousand Oaks, CA: SAGE; 1998.
15. Goodman LA, & Epstein, D. Listening to battered women: A survivor centered approach to advocacy, mental health and justice. Washington, DC: American Psychological Association; 2009.

16. Elliot DE, Bjelajac, P, Falot, R.D., Markoff, L.S., & Reed, B.G. Trauma-informed or trauma-denied: Principles and implementation of trauma-informed services for women. *Journal of Community Psychology*. 33 (2005) 461-77.
17. McHugo GJ, Kammerer N, Jackson EW, Markoff LS, Gatz M, Larson MJ, et al. Women, Co-occurring Disorders, and Violence Study: evaluation design and study population. *Journal of substance abuse treatment*. 28 (2005) 91-107.
18. McFarlane J. Strategies for successful recruitment and retention of abused women for longitudinal studies. *Issues in mental health nursing*. 28 (2007) 883-97.

TABLES & FIGURES

Figure A.1

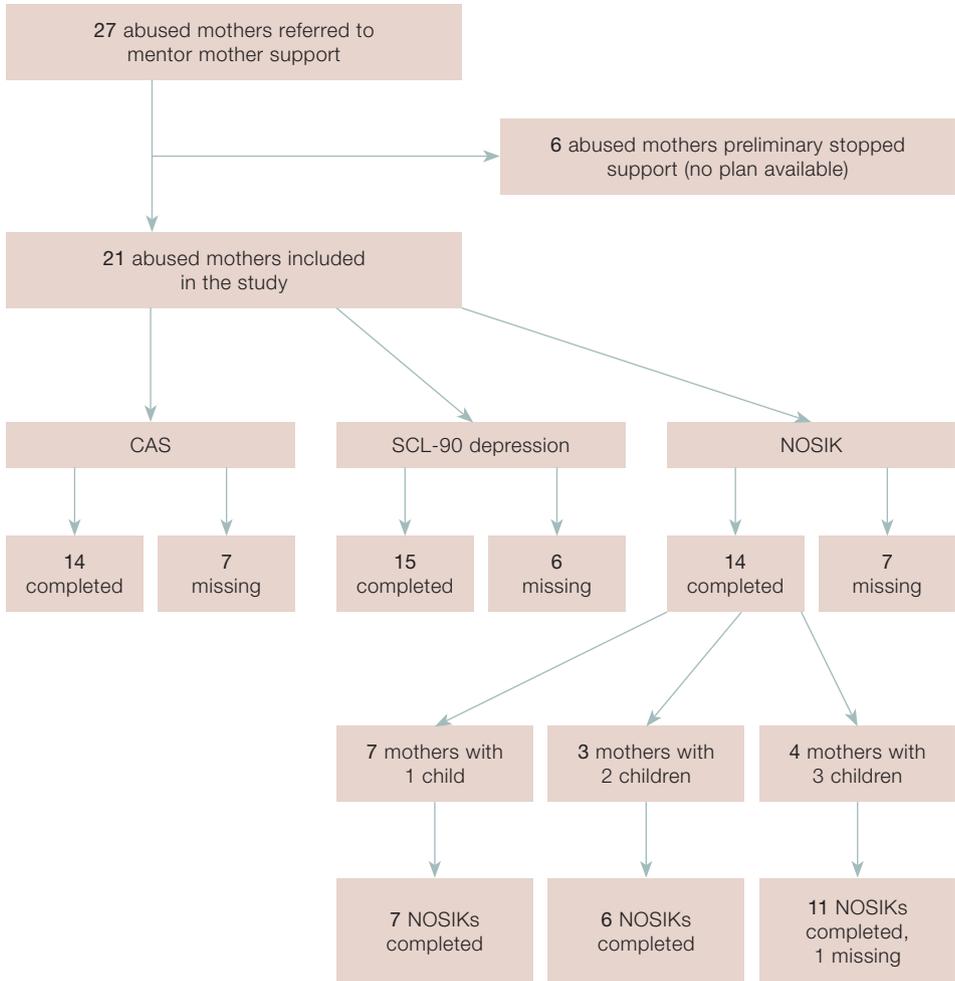


Table A.1 Quantitative outcomes effect mentor mother support

Questionnaire	n	Mean t = 0 (SD)	Mean t = 1 (SD)	$\Delta t = 0-1$ (95% CI)	p-value
CAS	14	30.8 (19,2)	30.1 (24.0)	-0.6 (-5.8 to 13.3)	0.91
SCL-90 depression	15	44.1 (16,4)	35.2 (17.8)	-8.9 (-0.4 to 18.1)	0.06
NOSIK	14 women 24 NOSIK's	40.5 (11,9)	40.5 (18.0)	0.0 (-7.7 to 7.8)	0.99

p-value < 0.05 = significant

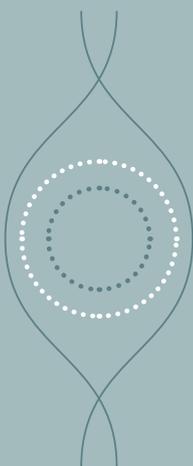
Table A.2 Personal goals, action plan and success per domain

Domain	Number of women with personal goal	Action plan	Success
Violence (n = 17)	10	++	++
	2	++	+
	2	++	*
	2	*	*
	1	-	-
Mental health (n = 12)	9	++	++
	1	++	*
	1	*	*
	1	-	-
Parenting (n = 9)	9	++	++
Social support (n = 11)	6	++	++
	4	++	+
	1	++	-
Daytime activities (n = 13)	5	++	++
	5	++	+
	1	-	-
	2	*	*

*++ = adhered to action plan / personal goal totally achieved; + partially adhered to action plan / personal goal partially achieved, * unclear (not completed mentor mother support)*

CHAPTER 7

GENERAL DISCUSSION



The aim of our study was to identify the conditions that influence successful implementation of mentor mother support in family practice and to evaluate its effects. To improve identification of IPV by family physicians and thereby facilitate the implementation of mentor mother support, we investigated whether gynaecological and pregnancy-associated conditions in family practice can be considered as indicators for IPV. To explore the facilitators and barriers of implementation, we first conducted a literature study on paraprofessional IPV interventions, such as mentor mother support, in primary care and next interviewed the authors of the selected relevant articles. To describe the factors that influence successful implementation of mentor mother support in family practice more specifically, we also interviewed both participating family physicians and abused mothers and organized a focus group with mentor mothers.

To evaluate the effects of mentor mother support, we performed a mixed-methods study, combining the commonly used method of questionnaires with a process evaluation. A process evaluation might give more insight into the health problems of abused women and their changing circumstances during the mentor mother support scheme. It might reveal, moreover, which method is most appropriate to evaluate the effects of personalized IPV interventions such as mentor mother support.

In this final chapter, we summarize and reflect on the main findings of the studies in this thesis, critically review the chosen methods and present recommendations for clinical practice, education and future research.

MAIN FINDINGS

In a cross-sectional waiting room survey in family practice, described in **Chapter 2**, we discovered that sexually transmitted infections, menstrual disorders, sexual problems, miscarriage or induced abortion were highly associated with IPV and could be seen as risk indicators for IPV in family practice. Furthermore, we found a lifetime prevalence of IPV in family practice in one in six women. This is in accordance with the literature.

In **Chapter 3**, we described our mixed methods study, which combined a literature study with semi-structured interviews to explore the facilitators and barriers of implementing a paraprofessional IPV intervention, such as mentor mother support, in primary care. The literature study, including eight studies, showed that implementation studies on paraprofessional IPV interventions in primary care are lacking. The semi-structured interviews clarified that, for implementation to be successful, both healthcare providers and society at large need to hold positive supporting attitudes towards victims of IPV and consider IPV as unacceptable. To prevent preliminary termination of support, by the abused mothers, the paraprofessionals' proactivity was essential. In order to offer

the kind of support that meets abused women's needs and fits their readiness for change, adequate training of healthcare providers and paraprofessionals was needed. Besides a good match between abused mothers and paraprofessionals, the healthcare providers' genuine engagement and attention for the victims was essential for successful implementation.

Family physicians' attitudes towards IPV and the abused women's stage of change, both of which influence successful implementation, were also found in our qualitative study, described in **Chapter 5**. Identification and discussion of abuse were hindered by family physicians' unawareness of IPV and their non-supporting attitude towards victims of IPV. Some family physicians expected abused mothers to take their own responsibility to break out of the violent situation and doubted whether proactively discussing IPV was their task. Furthermore, some considered the violent situation a result of the interaction between both partners, thus indicating that both had a responsibility to end the violent situation. The women's stage of change also appeared to be an important factor influencing identification of IPV and acceptance of mentor mother support. If an abused woman was unaware of the abnormality of the abuse, identification of abuse was hampered, and if she was not ready to accept help, the support offered, was not accepted.

In our qualitative implementation study we investigated a new factor, the unique role of mentor mothers as paraprofessional friends. As paraprofessional friends, the mentor mothers were considered to be more equal and less threatening and judgmental than healthcare professionals such as psychologists or psychiatrists. As a result, their role as paraprofessional friends positively influenced the acceptance and completion of mentor mother support. The mentor mothers' proactivity, furthermore, prevented the abused women from terminating the support preliminarily.

Chapter 6 combined a quantitative analysis with a process evaluation to evaluate the effects of mentor mother support. The process evaluation showed that there was a great diversity among the women's personal goals, which coincided with the stage of their partner relationship, emphasizing the need for personalized care. Virtually all personal goals were achieved. However, the quantitative analysis failed to show any significant change in IPV, depressive symptoms and parenting stress, supporting our hypothesis that process evaluation might be a more appropriate method than commonly used standardized questionnaires to measure the effect of a personalized IPV intervention such as mentor mother support. Furthermore, it may be unrealistic to expect a four month intervention to induce significant changes on an outcome like depression as IPV is a complex problem with long-term consequences.

REFLECTIONS ON THE FINDINGS

Below we will further explore three important themes, we identified, which facilitate the successful implementation of mentor mother support in family practice: personalized care; abused women's stages of change; and family physicians' attitudes towards IPV.

PERSONALIZED CARE

Partner violence is often a long-lasting problem that is hard to break. Van Lawick et al. (2003) describe the development and continuation of violence as a cyclical model, with the partners going through the same circle over and over again. At first, when expectations are high, the relationship is being romanticized by both partners, and the first tensions arise when these expectations prove to be unrealistic and the female stands up for what she wants. The male feels offended by this and, afraid of losing touch with his partner, may turn violent or show controlling behaviour. This tends to isolate the female increasingly. The male then often shows regret, causing the ideal of romantic love to reassert itself for a brief period before the spiral of violence starts all over again. (1)

Female victims of partner violence experience continuous intimidation and transgression of their boundaries. In addition, they often have low self-esteem, find themselves in social isolation, are survival-oriented and rarely seek help. This is largely caused by the taboo clinging to IPV, unawareness of the negative consequences of violence, negative experiences with professional care providers and dread of their partners. (2) So as to be able to help these women, it is of the utmost importance to present a non-judgmental attitude by family physicians, as they are often the first professional women turn to for help. Furthermore a low threshold intervention need to be offered that matches these women's needs.

Though all female victims of partner violence have gone through similar trauma and show related health problems, our process evaluation, described in Chapter 6, shows that the situations in which they find themselves are highly diverse. Some women are still caught up in their violent relationships; others have broken off their relationships, causing the violence to stop, but have not abandoned all contact for the sake of their children. Women whose violent relationships are still ongoing aim to diminish or end the violence; women whose relationships have been terminated often focus on their autonomy vis-à-vis their ex-partners, aiming to build their own independent lives and sever contacts.

In addition, there is also great diversity in the stage of change in which women find themselves, ranging from the problem awareness-raising stage to the stage at which they have taken action and, for example, have insisted on setting clearer boundaries to stop the violence. To match these women's different situations and their related needs,

it is necessary that the mentor mother support scheme offers personalized support. In the first meeting between a victim and the mentor mother, they discuss the victim's situation, and the victim formulates her personal goals, which are recorded in a treatment plan, which also comprises a plan of action drafted with the mentor mother's aid. In each subsequent meeting, the victim's progress is evaluated and if necessary, the action plan is adjusted. By taking into account each woman's personal circumstances, mentor mother support links up with the victim's personal needs, which may be different for each individual. Our process evaluation shows, for instance, that, though virtually all women experience mental health problems, almost half of them do not formulate personal goals in this domain. This may be because some women have moved on and are already receiving mental healthcare while others are not yet ready and are mainly engaged in relationship preservation or break-up decisions.

The large diversity in these women's personal circumstances requires personalized interventions that meet their personal needs. The importance of personalized care is also highlighted by Epstein et al. (2011), Reach (2016), and Ventres (2017) as they underline the importance of taking into account a patient's individual needs, goals and preferences. (3-5) In medical training and practice, the focus is mainly on the biomedical model, (5) but, with its narrow focus, this model is not suitable for handling complex problems such as IPV. As observed by Ventres (2017), patients need to be considered not only as a compilation of physiological pathways, organ systems and neural connections but as complex human beings complete with emotions, histories and behavioural patterns. (5) To offer personalized care, we need to use a biopsychosocial model, (6) which, besides biological factors, takes into account psychological factors such as cognitions and social factors such as social support networks to manage problems such as IPV. The importance of individualized care for female victims of IPV has also been described by others. (7-9) Kulkarni et al. (2012) organized focus groups with female victims of IPV and found that these women appreciated that their needs were taken into account. Once these needs were being met, they felt they could start making plans and regain hope for the future. (7) Furthermore, women in violent relationships often experience feelings of powerlessness. By encouraging them to formulate their own goals, they regain a sense of control over important life decisions and thus regain their autonomy. (10)

To study the effects of a personalized IPV intervention like mentor mother support, we also need to use personalized outcomes to match. Nevertheless, a systematic review by Bair Merrit et al. (2014), who reviewed the effectiveness of several IPV interventions, demonstrated that all selected studies used standardized outcomes and did not always have a positive effect. (11) By following an abused woman's individual process during mentor mother support, we demonstrated important changes in the abused women's lives,

including the achievement of virtually all their personal goals, while the standardized outcomes did not reveal any significant change. A new method involving a process evaluation with personalized outcomes like the one we conducted, promises to be a much more suitable instrument for evaluating the effect of a personalized IPV intervention.

ABUSED WOMEN'S STAGES OF CHANGE

As described above, abused women find themselves in different stages of change. This proved to be an important factor in the implementation of mentor mother support in family practice by influencing the acceptance of mentor mother support by abused women. The concept of 'stage of change', as we mentioned earlier in the introduction and described above, is based on the Transtheoretical Model of Change of Prochaska and DiClemente (12) and has also been described for women in abusive relationships. (13, 14)

This model can be used to select interventions that match the woman's stage of change and thus offer support for which she is ready. (15) In the pre-contemplation stage, for instance, abused women are unaware of the abnormality of the abuse and usually present with non-obvious medical complaints. Besides the short-term consequences of violence like bruises and injury, the abuse also leads to non-obvious long-term consequences like depression and medically unexplained symptoms. Physicians need to be alert to particular and non-obvious signs in abused women's help-seeking behaviour and inquire in sensitive ways. (16) In the stage of pre-contemplation, abused women want physicians to raise the issue but may be alienated if they actively take over control and proceed to launch care interventions or other activities. (15)

Other studies also applied the Transtheoretical model's stages of change to the experiences of abused women but concluded that this model may not be the most appropriate one to be used in practice. (17, 18) The process of change in IPV is very individual and influenced by external factors, such as the abuser's behaviour and social support network. These external factors appear to be more informative than the stages themselves. (18) As an alternative to the Transtheoretical Model of Change, Cluss et al. (2006) described a psychosocial readiness model, in which readiness to change is considered as a continuum, with maintenance of the status quo at one end and movement toward change at the other. (17) This model describes the balance of internal and external factors that affect IPV victims' readiness for change: the internal factors are awareness of IPV, perceived support and self-efficacy; the external factors in the model are interpersonal interactions – such as support from friends – and situational events, such as getting a job. The model demonstrates how readiness for change can be influenced by working on these factors. This also suits the mentor mother approach, which greatly values the external factors described above, such as social support and work.

Although Cluss et al. (2006) and Chang et al. (2006) criticize the Transtheoretical Model of Change, they also endorse readiness for change as an important factor influencing acceptance of support by victims of IPV. Nevertheless, the process of change is very individual and influenced by internal and external factors that need to be taken into account. Mentor mothers register these women's circumstances and support them in attaining the personal goals they have formulated, thus taking on board each woman's particular stage of change and individual needs. In addition, the mentor mothers are ideally placed to support women who are in an early stage of change and as yet not prepared to accept professional help: the mentor mothers are regarded as their paraprofessional friends, closer to them and less threatening than professional care providers; their non-judgmental and proactive attitudes, moreover, help the victims to keep accepting the help they offer.

ATTITUDES TOWARDS IPV

The first essential step in successful implementation of mentor mother support in family practice is the identification and discussion of abuse by family physicians. Their attitudes towards IPV, some aspects of which will be discussed below, prove to be an important barrier to the identification and discussion of abuse. This barrier has also been investigated by other studies. (19-25)

Although the family physicians in our study received two hours of IPV management training, they questioned whether the identification and discussion of abuse was their job and expected abused mothers to take personal responsibility in reporting IPV. In this respect, one may question the appropriate training time that is needed for reaching sufficient goals. The study of Rose et al. (2011) also indicates that physicians doubt whether enquiring about domestic violence should be one of their professional tasks and whether it comes within their competence. Rose et al. (2011) suggest that the dominance of our medical diagnostic and treatment model, with its focus on symptoms rather than underlying causes, probably contributes to these role boundaries. (20) We know, however, that female victims of IPV rarely disclose abuse themselves and experience barriers to disclosure, such as fear and self-blame. So if family physicians do not consider identification and discussion of abuse as part of their job, IPV will hardly ever be identified.

Furthermore, to date there has been a lack of guidelines on IPV identification and management in primary care in the Netherlands. Primary care guidelines are known to act as important facilitators of management of common medical problems. (26) Pre-service and in-service IPV training, moreover, is lacking in all medical faculties in the Netherlands, which possibly obstructs the acceptance and appropriate management of IPV as a common medical problem and might be an important cause of doctors' reluctant attitude.

Another attitudinal aspect is our finding that family physicians consider this vulnerable group as a difficult target group because IPV is a complex problem that is not easily solved. Offering support to abused women, therefore, is often accompanied by feelings of frustration and powerlessness. Williston et al. (22), who also conducted a study on the facilitators and barriers in identifying and discussing abuse, conclude that physicians are trained to be healers and solvers of medical problems and that they lack the competence and skills needed to manage IPV-related problems. This creates feelings of uncertainty. Besides, family physicians are afraid to open up 'Pandora's Box'. (22) An important barrier to enquiring about abuse, therefore, which has also been presented in other studies, is the doctors' uncertainty and lack of self-confidence in supporting abused women. (20-24) An earlier study showed that a more comprehensive training resulted in a more appropriate attitude regarding the response to abused women. (16) The overall negative attitude of the participating family physicians in our study leads to the conclusion that family physicians need more than the two hours of training they received in this study. A comprehensive training programme should increase their self-confidence, positively influence their attitude towards IPV and improve identification and discussion of abuse, which is a first and essential step for successful implementation of mentor mother support in family practice.

As shown in our study, an important impediment to the identification and discussion of abuse is the perception of some family physicians that victims of IPV are (partially) responsible for being victims of abuse. The literature shows that although the majority of family physicians do not hold such non-supporting attitudes, there still are family physicians that blame the victim. (19, 21, 25) Society's attitude towards IPV, lastly, plays an important part in a successful implementation process: as being a victim of partner abuse is still a taboo and accompanied by feelings of shame and inconvenience, a cultural change is needed. Therefore the government plays an important role by for instance informing society about IPV and connecting legal consequences to partner abuse.

METHODOLOGICAL CONSIDERATIONS

The number of women included in our MeMoSa Nijmegen study is small ($n = 27$) and the study had a relatively high dropout rate. Low inclusion and high dropout rates in female victims of partner violence in intervention studies are a familiar problem, which has also been reported in other studies. (27-30) It may possibly help to explain why we did not find any significant effects in our quantitative analysis of mentor mother support.

Another possible explanation for the lack of significant effects is the length of the follow-up period in our study design. The women who participated in the MeMoSa Nijmegen study completed the same questionnaires at the start of the mentor mother

support and two months after its termination. This six-month follow-up period may have been too short to expect any significant changes in relevant parameters, as these women had already been caught up in violent relationships for many years and were facing long-term consequences. It probably takes more time to be able to establish measurable effects on standardized outcome measures, such as depression.

However, as we also performed qualitative research through interviews and a process evaluation, we have been able to show that important changes do indeed take place in a relatively short period of 4 months of mentor mother support. This new method, therefore, has proved to be much more appropriate for evaluating short term effects, like making a decision to stay or leave their partner, expanding their social network, and handling children's problem behaviour.

RECOMMENDATIONS

CLINICAL PRACTICE

IPV interventions need to be person-centred to offer abused women the kind of care that matches their readiness for change. Mentor mother support is such an intervention that focuses on women's personal goals and offers support that meets women's personal needs.

We recommend that mentor mother support is embedded more widely in primary care, but, as our implementation study showed, there are several conditions that need to be met for such implementation to be successful. Therefore, we suggest to allow family physicians more time per patient and to lower their workload. The direct availability of mentor mother support and continuity of care need to be arranged. Mentor mothers need to receive adequate guidance and support to maintain their skills in supporting female victims of IPV. This will also help to prevent secondary victimization, which can be described as blaming the victim, a well-known phenomenon in care for female victims of IPV. (31)

Our interviews with participating family physicians showed that some of them still hold non-supporting attitudes towards IPV and feel incompetent and uncertain in recognizing and discussing IPV. As guidelines are known to facilitate quality of care, we recommend the Dutch College of Family Physicians (NHG) to develop an IPV guideline for primary care. (26)

EDUCATION

To improve doctors' competence and self-confidence in supporting abused women, it is essential to implement IPV in the medical curriculum as an important health issue, to provide ongoing IPV training to family physicians and to review IPV cases with regularity. It is essential for family physicians to learn how to identify and discuss abuse, and attention

must be paid to their attitudes towards IPV because our study shows that physicians' reluctant attitude was one of the main barriers to successful implementation of mentor mother support. Family physicians' understanding of the problem will improve by paying attention to the stages of change and the processes female victims of IPV go through.

Although the biopsychosocial model has now become commonplace in the healthcare sector and in medical education, it appears that the biological component with clear guidelines still dominates. To improve competence and self-confidence, more attention and training needs to be offered that also focuses on the psychosocial component of the biopsychosocial model. As family physicians are informed about a patient's context, they in particular are equipped for contextual medicine using the biopsychosocial model. It is important to introduce this model early on in medical training and to teach medical students to understand the scope of IPV, to be aware of their attitude and to communicate empathetically with women suspected to be suffering from abuse in their relationships.

RESEARCH

In general, IPV studies struggle with recruitment and retention of abused women. Although this is a well-known phenomenon, (27) there are ways to lower the number of women who drop out. Mc Farlane et al. (28) examined retention rates in longitudinal studies and presented the following four strategies to maximize recruitment and retention: establishing and sustaining collaborative partnerships with agencies, multiple contact sources with study participants, incremental monetary incentives and a detailed field tracking protocol that includes safety practices. Although these are laborious strategies, high retention rates promote the scientific integrity of the research. (28)

Standardized questionnaires are commonly used in effectiveness studies on IPV interventions. We recommend a process evaluation using personalized outcomes. As mentor mothers offer personalized support that take into account abused women's personal situation and stages of change, this also requires a method with personalized outcomes to match.

Furthermore, we recommend extending the follow-up period and establishing a prospective cohort study to examine the long-term effects of mentor mother support or other IPV interventions. This would also enable us to demonstrate whether the effects we already found are sustainable over time.

Finally, we suggest continuing to examine associations between IPV and health problems to improve recognition of IPV. As the heterogeneity of causes of most health problems still makes it difficult for family physicians to recognize IPV, it would be interesting to study the predictive value of a combined model of health problems. To implement

active asking about IPV by family physicians successfully, moreover, more studies on interventions are needed.

CONCLUSION

To implement mentor mother support successfully in family practice, family physicians, first of all, need to have positive supporting attitudes towards IPV and feel competent to identify and discuss IPV with the victim. Abused women, secondly, need to be given personalized care that matches their readiness for change. Finally, low threshold paraprofessional support, such as mentor mother support, needs to be offered to more female victims of IPV. By playing their role as paraprofessional friends, mentor mothers are considered to be more equal and less judgmental than healthcare professionals, lowering the threshold for acceptance of support. By attuning their support to the abused women's personal situations, mentor mothers offer personalized care that brings about important changes in these women's lives. To measure the effect of such a tailored IPV intervention, a process evaluation, monitoring an abused woman's individual process, proves to be an appropriate method for measuring multiple effects of such a tailored IPV intervention, demonstrating that important changes do occur and that virtually all personal goals can be achieved.

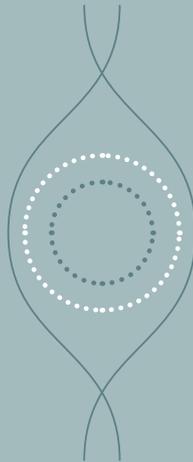
The association between IPV and some gynaecological and pregnancy-associated conditions again demonstrated that IPV is associated with negative health outcomes and emphasizes the necessity to develop, study and implement effective IPV interventions to stop, or at least diminish, the negative consequences of IPV.

REFERENCES

1. Lawick J. G, M. Intieme oorlog: over geweld en kwetsbaarheid in gezinsrelaties; met een bijdrage van J. Baars [Intimate war: about violence and vulnerability in family relations; with a contribution of J. Baars]. Amsterdam: Van Genneep; 2003.
2. Prozman GJ, Lo Fo Wong SH, Lagro-Janssen AL. Why abused women do not seek professional help: a qualitative study. *Scandinavian journal of caring sciences*. 2014;28(1):3-11.
3. Epstein RM, Street RL. The Values and Value of Patient-Centered Care. *Annals of family medicine*. 2011;9(2):100-3.
4. Reach G. Simplistic and complex thought in medicine: the rationale for a person-centered care model as a medical revolution. *Patient preference and adherence*. 2016;10:449-57.
5. Ventres WB. Looking Within: Intentions of Practice for Person-Centered Care. *Annals of family medicine*. 2017;15(2):171-4.
6. Engel GL. The need for a new medical model: a challenge for biomedicine. *Science (New York, NY)*. 1977;196(4286):129-36.
7. Kulkarni SJ, Bell H, Rhodes DM. Back to basics: essential qualities of services for survivors of intimate partner violence. *Violence Against Women*. 2012;18(1):85-101.
8. Davies JM, Lyons, E., & Monti-Catania, D. Safety planning with battered women: Complex lives/difficult choices. Thousand Oaks, CA: SAGE; 1998.
9. Goodman LA, & Epstein, D. Listening to battered women: A survivor centered approach to advocacy, mental health and justice. Washington, DC: American Psychological Association; 2009.
10. Elliot DE, Bjelajac, P., Fallot, R.D., Markoff, L.S., & Reed, B.G. Trauma-informed or trauma-denied: Principles and implementation of trauma-informed services for women. *Journal of Community Psychology*. 2005;33:461-77.
11. Bair-Merritt MH, Lewis-O'Connor A, Goel S, Amato P, Ismailji T, Jelley M, et al. Primary care-based interventions for intimate partner violence: a systematic review. *American journal of preventive medicine*. 2014;46(2):188-94.
12. Prochaska JO, Velicer WF. The transtheoretical model of health behavior change. *American journal of health promotion : AJHP*. 1997;12(1):38-48.
13. Reisenhofer S, Taft A. Women's journey to safety - the Transtheoretical model in clinical practice when working with women experiencing Intimate Partner Violence: a scientific review and clinical guidance. *Patient education and counseling*. 2013;93(3):536-48.
14. Frasier PY, Slatt L, Kowlowitz V, Glowa PT. Using the stages of change model to counsel victims of intimate partner violence. *Patient education and counseling*. 2001;43(2):211-7.
15. Zink T, Elder N, Jacobson J, Klostermann B. Medical Management of Intimate Partner Violence Considering the Stages of Change: Precontemplation and Contemplation. *Annals of family medicine*. 2004;2(3):231-9.
16. Lo Fo Wong S, Wester F, Mol SS, Lagro-Janssen TL. Increased awareness of intimate partner abuse after training: a randomised controlled trial. *The British journal of general practice : the journal of the Royal College of General Practitioners*. 2006;56(525):249-57.
17. Cluss PA, Chang JC, Hawker L, Scholle SH, Dado D, Buranosky R, et al. The process of change for victims of intimate partner violence: support for a psychosocial readiness model. *Women's health issues : official publication of the Jacobs Institute of Women's Health*. 2006;16(5):262-74.

18. Chang JC, Dado D, Ashton S, Hawker L, Cluss PA, Buranosky R, et al. Understanding behavior change for women experiencing intimate partner violence: mapping the ups and downs using the stages of change. *Patient education and counseling*. 2006;62(3):330-9.
19. Garimella R, Plichta SB, Houseman C, Garzon L. Physician beliefs about victims of spouse abuse and about the physician role. *Journal of women's health & gender-based medicine*. 2000;9(4):405-11.
20. Rose D, Trevillion K, Woodall A, Morgan C, Feder G, Howard L. Barriers and facilitators of disclosures of domestic violence by mental health service users: qualitative study. *The British journal of psychiatry : the journal of mental science*. 2011;198(3):189-94.
21. Sugg NK, Thompson RS, Thompson DC, Maiuro R, Rivara FP. Domestic violence and primary care. Attitudes, practices, and beliefs. *Archives of family medicine*. 1999;8(4):301-6.
22. Williston CJ, Lafreniere KD. "Holy cow, does that ever open up a can of worms": health care providers' experiences of inquiring about intimate partner violence. *Health care for women international*. 2013;34(9):814-31.
23. Colombini M, Mayhew S, Ali SH, Shuib R, Watts C. "I feel it is not enough..." Health providers' perspectives on services for victims of intimate partner violence in Malaysia. *BMC health services research*. 2013;13:65.
24. Gutmanis I, Beynon C, Tutty L, Wathen CN, MacMillan HL. Factors influencing identification of and response to intimate partner violence: a survey of physicians and nurses. *BMC public health*. 2007;7:12.
25. Sprague S, Kaloty R, Madden K, Dosanjh S, Mathews DJ, Bhandari M. Perceptions of intimate partner violence: a cross sectional survey of surgical residents and medical students. *Journal of injury & violence research*. 2013;5(1):1-10.
26. Watkins C, Harvey I, Langley C, Gray S, Faulkner A. General practitioners' use of guidelines in the consultation and their attitudes to them. *The British journal of general practice : the journal of the Royal College of General Practitioners*. 1999;49(438):11-5.
27. McHugo GJ, Kammerer N, Jackson EW, Markoff LS, Gatz M, Larson MJ, et al. Women, Co-occurring Disorders, and Violence Study: evaluation design and study population. *Journal of substance abuse treatment*. 2005;28(2):91-107.
28. McFarlane J. Strategies for successful recruitment and retention of abused women for longitudinal studies. *Issues in mental health nursing*. 2007;28(8):883-97.
29. Prozman GJ, Lo Fo Wong SH, Lagro-Janssen AL. Support by trained mentor mothers for abused women: a promising intervention in primary care. *Family practice*. 2014;31(1):71-80.
30. Taft AJ, Small R, Hegarty KL, Watson LF, Gold L, Lumley JA. Mothers' AdvocateS In the Community (MOSAIC)--non-professional mentor support to reduce intimate partner violence and depression in mothers: a cluster randomised trial in primary care. *BMC public health*. 2011;11:178.
31. Hattendorf J, Tollerud TR. Domestic violence: counseling strategies that minimize the impact of secondary victimization. *Perspectives in psychiatric care*. 1997;33(1):14-23.

CHAPTER 8
SUMMARY /
SAMENVATTING



SUMMARY

CHAPTER 1 describes the background, relevance and objectives of the study. It gives an overview of the content of this manuscript.

Intimate partner violence (IPV) is highly prevalent and has negative consequences for the physical and mental health of the victim and the children, who often witness the violence between their parents. To diminish these negative consequences it is essential that IPV is early identified and adequate support is offered. Family physicians play an important role as they are often the first person abused women turn to for help. Furthermore, they often have a long relationship of trust with their patients, which enable them to recognize symptom patterns and discuss the abuse. However family physicians often do not recognize the hidden symptoms of IPV, because among other things they lack competence and self-confidence to identify and discuss the abuse. Besides, fear and shame hinder the victim to disclose the abuse. To improve identification of abuse it is useful to investigate which health problems can be considered as indicators of IPV. Moreover there have been developed an effective training for family physicians that improves identification and discussion of abuse.

After identification of IPV it is necessary to offer adequate support. Mentor mother support proved to be an effective low threshold intervention in family practice for mothers who are victims of IPV. To investigate whether this effective intervention is successfully translated into daily practice, an implementation study is needed.

With the studies described in this manuscript we investigate which conditions need to be met to successfully implement mentor mother support in family practice. This thesis will address three objectives:

- 1) Examine if gynaecological and pregnancy-associated conditions in family practice are indicators for IPV.
- 2) Investigate which factors facilitate or hinder the implementation of mentor mother support in family practice.
- 3) Evaluate the effect of implementing mentor mother support in family practice by mixed methods, combining a quantitative study with standardized outcomes with a process evaluation with personalized outcomes

CHAPTER 2 describes the results of the study on the association between IPV and the prevalence of gynaecological and pregnancy-associated conditions in family practice. In the waiting rooms of 12 family practices women of 18 years or older were invited to

participate in our study. Questionnaires were used to measure IPV, gynaecological and pregnancy-associated conditions. 262 Women participated in our study. The actual prevalence of IPV was 8,7 percent and the lifetime prevalence was 17,6 percent. Sexually transmitted infections, menstrual disorders, sexual problems, miscarriage and induced abortion were significantly more common in abused than non-abused women. Therefore these gynaecological and pregnancy-associated conditions can be seen as indicators for IPV in family practice.

In CHAPTER 3 we investigated which factors facilitated or hindered implementation of paraprofessional support for female victims of IPV in primary care, by means of a literature study and interviews. During our literature study we screened 1117 articles for inclusion. Finally eight articles applied to the selection criteria. For more information about the implementation we interviewed seven authors of six articles. Important societal conditions for successful implementation are financing, time and a positive supporting attitude towards victims of IPV. On the individual level the healthcare provider's attitude and self-efficacy, the abused woman's readiness for change, the paraprofessional's proactivity, and bond between abused woman and paraprofessional, are important factors that influence implementation. On the intervention level, routine screening, training of paraprofessionals and professional healthcare providers, matching between victim and paraprofessional, and a plan that fits the woman's needs are important facilitators.

CHAPTER 4 contains the study protocol that describes the content of mentor mother support and describes the objectives and methods that will be used. The primary objective is to investigate which factors facilitate or hinder the implementation of mentor mother support in family practice. The secondary objective is to evaluate the effect of mentor mother support on IPV, depressive symptoms, the mother-child relationship, social support and acceptance of professional support. The implementation process will be evaluated by means of focus groups, interviews and questionnaires. To evaluate the effect of mentor mother support, questionnaires, report forms, medical records and interviews will be used.

In CHAPTER 5 we describe the results of the study on the facilitators and barriers of implementing mentor mother support in family practice. We interviewed 12 family physicians, 16 abused mothers and three mentor mothers. Besides we organized one focus group with four mentor mothers. The qualitative analysis shows that identification and discussion of abuse are hindered by the family physician's attitude towards IPV. Female victims of IPV are considered as a difficult target group with a responsibility of

their own to break through the violent situation. Acceptance of mentor mother support is related to abused women's readiness for change. Mentor mothers facilitate acceptance and completion of support by connecting like a friend who is more equal and less threatening compared to professionals.

CHAPTER 6 describes the effect evaluation of mentor mother support by combining a quantitative analysis of questionnaires with a qualitative process evaluation of report forms. Twenty seven women accepted mentor mother support. The quantitative analysis showed no significant differences between pre- and post IPV, depressive symptoms and parenting stress. However, the qualitative process evaluation shows that virtually all personal goals were achieved. The content of these personal goals coincides with the stage of their relationship. Furthermore, 39 percent of women who completed the support programme showed a positive change in their social support networks and acceptance of professional help for their children. Fifty percent of the women showed a positive change in their acceptance of professional help. To evaluate the effect of a personalized IPV intervention like mentor mother support, we recommend a process evaluation with personalized outcomes that provides a better match with the process female victims of IPV are going through.

CHAPTER 7 describes the main findings of the study and related themes. Methodological considerations are addressed and recommendations for clinical practice, education and research are given.

The waiting room survey in family practice showed that gynaecological and pregnancy-associated conditions are more common in abused than non-abused women. It demonstrates again that IPV has negative consequences for the victim's health. Therefore we recommend to continue studies on the association between IPV and health problems in order to improve identification of IPV by healthcare providers.

For successful implementation of mentor mother support a positive supporting attitude of the family physician towards support for abused women is needed. Furthermore they have to feel competent to recognize and discuss IPV. Therefore it is important to offer family physicians adequate training and support, which focuses on their attitude towards IPV and their skills to identify and discuss abuse. Besides we recommend to implement IPV in the medical curriculum as an important health issue and address the importance of the psychosocial components of health problems.

Mentor mothers offer personalized support by focusing on a woman's personal goals that match their stage of change and personal needs. Although the quantitative analysis did not show any significant change between pre- and post IPV, depressive symptoms

and parenting stress, our qualitative process evaluation shows that virtually all personal goals were achieved. To evaluate the effect of a personalized IPV intervention, we recommend a process evaluation with personalized outcomes that provides a better match with the process female victims of IPV are going through. Furthermore mentor mothers are considered as paraprofessional friends that are more equal and less threatening than professional healthcare providers. Thereby they lower the threshold for acceptance of support by this hard to reach population. We recommend to embed mentor mother support more widely in primary care. IPV interventions need to be personalized to match women's' personal goals.

Limitations of our study are the small number of included women ($n = 27$) and a relatively high dropout rate. Furthermore our follow-up period was probably too short to find significant effects on certain outcome measures. However, by our qualitative research we have been able to show that important changes do indeed take place during mentor mother support.

SAMENVATTING

HOOFDSTUK 1 beschrijft de achtergrond, relevantie en doelen van deze studie. Het geeft een overzicht van de inhoud van dit proefschrift.

Partnergeweld is een veel voorkomend probleem met negatieve gevolgen voor de lichamelijke en geestelijke gezondheid van het slachtoffer. Dit geldt ook voor de kinderen, die getuigen zijn van het geweld tussen beide ouders. Om deze gezondheidsproblemen te beperken, is het van groot belang dat partnergeweld tijdig wordt herkend en dat er adequate hulp wordt geboden. Huisartsen kunnen daarbij een belangrijke rol spelen, omdat zij vaak de eerste hulpverlener zijn waar vrouwelijke slachtoffers van partnergeweld hulp zoeken. Doordat er vaak sprake is van een langdurige vertrouwensrelatie tussen huisarts en patiënt, zijn zij in staat om patronen te herkennen en het geweld bespreekbaar te maken. De verborgen signalen van partnergeweld blijken meestal niet herkend te worden door de huisarts. Dit komt onder andere door het ontbreken van de vaardigheid en het zelfvertrouwen van de huisarts om partnergeweld te signaleren en te bespreken. Het slachtoffer wordt door angst en schaamte belemmerd om over het geweld te praten. Om de signalering van partnergeweld te verbeteren, moet worden vastgesteld welke gezondheidsproblemen indicatoren voor partnergeweld zijn. Daarnaast is er een effectieve training voor huisartsen ontwikkeld, waardoor de signalering en het bespreekbaar maken van partnergeweld verbeteren.

Na herkenning van partnergeweld moet adequate hulp worden geboden. Mentormoederhulp is een effectieve laagdrempelige interventie in de huisartspraktijk voor moeders die slachtoffer zijn van partnergeweld. In een implementatiestudie wordt vastgesteld of deze interventie ook succesvol vertaald kan worden naar de dagelijkse praktijk. In deze studie wordt onderzocht welke factoren succesvolle implementatie van mentormoederhulp in de huisartspraktijk faciliteren of belemmeren.

Met de onderzoeken, die in dit proefschrift worden beschreven, stellen wij vast aan welke voorwaarden moet worden voldaan om mentormoederhulp succesvol in de huisartspraktijk te implementeren. De studie heeft drie doelen:

- 1) Onderzoeken of gynaecologische en aan zwangerschap gerelateerde problemen in de huisartspraktijk indicatoren zijn voor partnergeweld.
- 2) Vaststellen welke factoren de implementatie van mentormoederhulp in de huisartspraktijk faciliteren of belemmeren.
- 3) Evalueren van het effect van mentormoederhulp in de huisartspraktijk.

HOOFDSTUK 2 beschrijft de resultaten van het onderzoek naar de relatie tussen partnergeweld en het voorkomen van gynaecologische en aan zwangerschap gerelateerde problemen in de huisartspraktijk. In 12 huisartspraktijken is in de wachtkamer aan vrouwen van 18 jaar of ouder gevraagd, of zij wilden deelnemen aan het onderzoek. Om partnergeweld, gynaecologische en aan zwangerschap gerelateerde klachten te meten, is gebruikt gemaakt van vragenlijsten. Aan het onderzoek namen 262 vrouwen deel. Van deze vrouwen was 17,6% ooit slachtoffer van partnergeweld. Het afgelopen jaar was 8,7% slachtoffer van partnergeweld. Seksueel overdraagbare aandoeningen, menstruatiestoornissen, seksuele problemen, miskramen en abortussen kwamen significant vaker voor bij vrouwelijke slachtoffers van partnergeweld dan bij vrouwen zonder partnergeweld. Deze gynaecologische en aan zwangerschap gerelateerde problemen kunnen daarmee in de huisartspraktijk als indicatoren van partnergeweld worden gebruikt.

In HOOFDSTUK 3 is door middel van een literatuurstudie en interviews vastgesteld, welke factoren implementatie van paraprofessionele hulp voor vrouwelijke slachtoffers van partnergeweld in de eerstelijnszorg faciliteren of belemmeren. Gedurende de literatuurstudie werden 1117 artikelen gevonden, waarvan uiteindelijk 8 artikelen voldeden aan onze selectiecriteria. Voor extra informatie over de implementatie werden 7 auteurs van 6 artikelen geïnterviewd. Belangrijke maatschappelijke voorwaarden voor succesvolle implementatie zijn financiering, tijd en een positieve houding ten aanzien van de slachtoffers van partnergeweld. Op het individuele niveau blijken de attitude met betrekking tot partnergeweld, het zelfvertrouwen van de hulpverlener om met deze problematiek om te gaan, de fase waarin het slachtoffer zich bevindt, een proactieve houding van de paraprofessional en de relatie tussen het slachtoffer en de paraprofessional, van invloed op de implementatie. Op interventieniveau spelen screening van alle vrouwen op partnergeweld, training van paraprofessionals en professionele hulpverleners, een goede relatie tussen slachtoffer en paraprofessional en een plan van aanpak, dat aansluit bij de behoeftes van het slachtoffer, een belangrijke faciliterende rol.

HOOFDSTUK 4 beschrijft het studieprotocol, waarin wordt omschreven wat de interventie mentormoederhulp inhoudt, welke doelen we onderzoeken en welke methoden worden gebruikt. Het primaire doel van de studie is om vast te stellen welke factoren de implementatie in de huisartspraktijk faciliteren of belemmeren. Daarnaast wordt het effect van mentormoederhulp op geweld, depressieve klachten, de moeder-kind relatie, sociale steun en acceptatie van professionele hulp gemeten. Het implementatieproces wordt geëvalueerd met behulp van focusgroepen, interviews en vragenlijsten. Voor de effectmeting

wordt gebruik gemaakt van vragenlijsten, rapportage-formulieren, medische dossiers en interviews.

In **HOOFDSTUK 5** worden de resultaten van de studie naar de faciliterende en belemmerende factoren bij implementatie van mentormoederhulp in de huisartspraktijk beschreven. Hiervoor zijn 12 huisartsen, 16 vrouwelijke slachtoffers van partnergeweld en 3 mentormoeders geïnterviewd. Daarnaast vond er 1 focusgroep met 4 mentormoeders plaats. Uit de kwalitatieve analyse van deze gegevens blijkt, dat signalering en het bespreekbaar maken van partnergeweld worden belemmerd door de houding van de huisarts ten aanzien van partnergeweld. Vrouwelijke slachtoffers van partnergeweld worden door hen als lastige patiënten beschouwd met een eigen verantwoordelijkheid om uit deze gewelddadige situatie te komen. De acceptatie van mentormoederhulp door het vrouwelijke slachtoffer van partnergeweld wordt voor een groot deel bepaald door de fase waarin zij zich bevindt. Mentormoeders faciliteren acceptatie en continuering van de hulp die zij bieden, doordat ze een vriendschappelijke relatie opbouwen, die als gelijkwaardiger en minder bedreigend wordt beschouwd dan de relatie met een professionele zorgverlener.

HOOFDSTUK 6 beschrijft de effectevaluatie van mentormoederhulp. Daarbij is gebruik gemaakt van een kwantitatieve analyse van vragenlijsten en een kwalitatieve procesevaluatie met behulp van rapportageformulieren. 27 Vrouwen accepteerden mentormoederhulp en deelname aan het onderzoek. De kwantitatieve analyse laat geen significante verschillen zien tussen de voor- en nameting met betrekking tot partnergeweld, depressieve klachten en stress omtrent de opvoeding. De kwalitatieve procesevaluatie laat echter zien dat bijna alle persoonlijke doelen van de vrouwen worden behaald. De inhoud van deze persoonlijke doelen hangt voor een groot deel samen met de fase van de relatie waarin de vrouw zich bevindt. Verder blijken sociale steun en acceptatie van professionele hulp voor de kind(eren) positief te veranderen bij 39 procent van de vrouwen. Bij 50 procent van de vrouwen vindt een positieve verandering plaats ten aanzien van acceptatie van professionele hulp voor de vrouw zelf. Om het effect van een persoonsgerichte interventie zoals mentormoederhulp te evalueren, adviseren wij om gebruik te maken van een procesevaluatie met persoonsgerichte uitkomstmaten die daarop aansluiten.

HOOFDSTUK 7 beschrijft de belangrijkste resultaten uit deze studie en de daaraan gerelateerde thema's. De onderzoeksmethoden worden beschouwd en aanbevelingen voor de praktijk, het onderwijs en het onderzoek worden beschreven.

Uit het wachtkameronderzoek in de huisartspraktijk blijkt, dat enkele gynaecologische en aan zwangerschap gerelateerde klachten vaker voorkomen bij vrouwelijke slachtoffers van partnergeweld, dan bij vrouwen die geen slachtoffer zijn geweest van partnergeweld. Het toont opnieuw aan dat partnergeweld negatieve gevolgen heeft voor de gezondheid van het slachtoffer. We adviseren dan ook om het onderzoek naar de relatie tussen het voorkomen van partnergeweld en gezondheidsproblemen te continueren, zodat hulpverleners partnergeweld beter leren herkennen.

Voor succesvolle implementatie van mentormoederhulp blijkt een positieve houding van de huisarts, ten aanzien van hulp aan vrouwelijke slachtoffers van partnergeweld, van belang te zijn. Daarnaast moeten zij zich competent voelen om partnergeweld te herkennen en bespreekbaar te maken. Het is daarom belangrijk om huisartsen een passende training en ondersteuning te bieden. Deze training moet zich richten op de attitude ten aanzien van partnergeweld en de vaardigheden om het geweld te herkennen en te bespreken. Wij adviseren om partnergeweld in het curriculum van geneeskundestudenten op te nemen en het belang van de psychosociale componenten rondom gezondheidsproblemen te benadrukken.

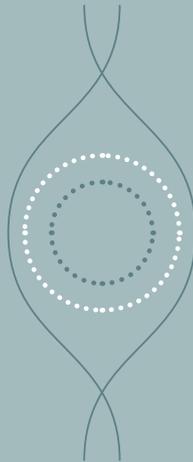
Mentormoeders bieden persoonsgerichte zorg, doordat de ondersteuning aansluit bij de fase van verandering en de persoonlijke behoeftes van de vrouw. De kwantitatieve analyse laat geen significante verschillen zien tussen de voor- en nameting ten aanzien van het geweld, depressieve klachten en stress omtrent de opvoeding. Terwijl uit de kwalitatieve procesevaluatie blijkt dat vrijwel alle persoonlijke doelen worden gerealiseerd. Wij adviseren om bij de evaluatie van een persoonsgerichte interventie gebruik te maken van een procesevaluatie met persoonsgerichte uitkomstmaten die daarop aansluiten.

Daarnaast worden de mentormoeders, door hun rol als paraprofessionele vriendin, als gelijkwaardiger en minder bedreigend gezien dan een professionele hulpverlener. Daarmee verlagen zij de drempel tot acceptatie van hulp voor deze vaak moeilijk bereikbare groep vrouwen. Wij adviseren dan ook om mentormoederhulp op meer plekken binnen de eerstelijnszorg te implementeren. Interventies voor vrouwelijke slachtoffers van partnergeweld dienen persoonsgericht te zijn, zodat ze aansluiten bij de persoonlijke behoeftes van de vrouw.

Beperkingen van onze studie zijn het kleine aantal geïncludeerde vrouwen ($n = 27$), waarvan een relatief groot aantal is uitgevallen gedurende de studie. Daarnaast was de tijd tussen voor- en nameting mogelijk te kort om significante effecten te vinden op bepaalde uitkomstmaten. Door ons kwalitatieve onderzoek zijn we echter wel in staat geweest om aan te tonen dat er belangrijke veranderingen plaatsvinden tijdens mentormoederhulp.

CHAPTER 9

DANKWOORD



Tot slot wil ik graag iedereen bedanken die bij het tot stand komen van dit proefschrift betrokken is geweest.

Toine, toen je hoorde dat ik huisarts wilde worden, was jij degene die mij als promotor benaderde voor dit onderzoek. Ik waardeer jouw enthousiasme, ongelofelijke inzet voor het vak en je snelle feedback op ingezonden stukken. Ik vind het bijzonder en mooi om te zien hoe jij, ondanks zo'n drukke agenda, altijd interesse toont voor jouw promovendi. Een bespreking begon altijd met koffie, thee, koekjes en de vraag: "Hoe gaat het met je?" Vooral het laatste jaar heb ik als zwaar ervaren. Ik waardeer jouw begrip voor de situatie en de hulp die je hebt geboden bij het voltooien van dit proefschrift. Heel veel dank daarvoor.

Sylvie, jij bent de expert op het gebied van partnergeweld en haalde mentormoederhulp naar Nederland. Ook bij het MeMoSA project Nijmegen ben jij nauw betrokken geweest. Je was altijd op de hoogte van de laatste onderzoeken en deelde jouw ervaringen als huisarts met deze complexe problematiek. Bedankt daarvoor.

Fred, jou wil ik ook graag bedanken voor jouw bijdrage als tweede promotor van mijn promotieonderzoek. Tijdens onze bijeenkomsten heb ik jouw directheid en kritische houding erg kunnen waarderen. Soms betekende dit dat alles anders moest, maar het werd er altijd beter door.

Miranda, je gaf als co-promotor tijdens bijeenkomsten goede adviezen, die zeer verhelderend waren. En ook buiten deze bijeenkomsten was jij bereid om mee te kijken en adviezen te geven. Bedankt daarvoor.

Graag dank ik ook de leden van de manuscriptcommissie, prof. dr. R.J. van der Gaag (voorzitter), prof. dr. G.J.M. Hutschemaekers en prof. dr. J.F.M. Metsemakers, die mijn proefschrift inhoudelijk hebben beoordeeld.

Mentormoeders Natasja, Jolanda, Gulnaz, Cemile, Aqlima, Irma, Yesim en Astrid en mentorcoördinator Paulien wil ik graag bedanken voor hun inzet bij dit project. Naast jullie betrokkenheid en begeleiding van de moeders, die slachtoffer zijn van partnergeweld, hebben jullie ook een bijdrage geleverd aan mijn onderzoek. Jullie verzamelden de vragenlijsten en rapporteerden over jullie gesprekken. Dit leverde zeer waardevolle informatie op die ik kon gebruiken voor mijn onderzoek.

Daarnaast wil ik ook de huisartsen en leden van de klankbordgroep bedanken, die tijd vrij hebben gemaakt om deel te nemen aan dit project.

De moeders die besloten om deel te nemen aan MeMoSA Nijmegen, wil ik bedanken voor hun vertrouwen en medewerking aan dit onderzoek.

Margriet, ook jij hebt een hele belangrijke bijdrage geleverd aan het MeMoSA project. Je benaderde de huisartsen, verzamelde de data en interviewde moeders en huisartsen. Jouw betrokken houding en inlevingsvermogen hebben ervoor gezorgd, dat vrouwen zich op hun gemak voelden tijdens de interviews en belangrijke informatie met ons wilden delen. Je bent al weer een tijdje met pensioen, maar wat leuk dat we elkaar nog steeds tegenkomen op promoties en congressen. Heel veel dank voor jouw hulp!

Daarnaast wil ik graag Hannie Halma bedanken voor haar bijdrage aan de interviews met de moeders en de studenten Vincent Pietersen, Simone Vermeulen en Jasper Daemen voor hun bijdrage aan dit onderzoek.

Verder dank aan Hans Bor voor zijn ondersteuning bij de statistische analyses, Elmie Peters voor haar bijdrage aan de literatuurstudie en Rikkert Stuve voor zijn ondersteuning bij de Engelse vertaling.

Sanne, wat fijn dat jij de cover en de layout van dit proefschrift wilde verzorgen. Ik dacht gelijk aan jou en wist zeker dat je er iets moois van ging maken. Heel veel dank!

Met het afronden van dit proefschrift komt ook een einde aan het werken op de universiteit in Nijmegen. Ik ga het zeker missen en wil mijn collega's van de afdeling Eerstelijngeneeskunde dan ook graag bedanken voor de fijne tijd die ik hier heb gehad. Speciale dank aan mijn kamergenoten Karin, Kees, Gert-Jan, Margret, Frans, Elza, Annette en Anouk. Na mijn verhuizing zagen we elkaar minder, maar ik vond het altijd fijn om jullie weer te zien en ervaringen uit te wisselen. Ik hoop dat we contact blijven houden.

Kees, wat leuk dat jij tijdens de verdediging naast mij staat als paranimf. Je was een erg plezierige kamergenoot. Ik heb genoten van jouw enthousiasme en ideeën over het huisartsenvak.

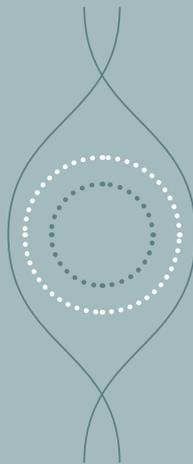
Sjoerd, mijn broer en paranimf. Wat fijn dat jij straks naast mij staat. Het is eindelijk zover, je zusje gaat promoveren.

Papa en mama, jullie hebben me altijd gesteund en gestimuleerd om te studeren. Ik vind het heel fijn om te weten dat ik altijd bij jullie terecht kan. En ook al heb ik na het afronden van mijn promotie geen slaapplek meer nodig, ik weet zeker dat ik nog vaak jullie kant op kom. Ook ik ga die gezelligheid missen. Dank jullie wel.

Hartger, jou leerde ik kennen toen mijn promotietraject al een aardig eind op weg was, maar zoals zo vaak wordt gezegd: “De laatste loodjes wegen het zwaarst”. In deze periode heb ik jou als een grote steun ervaren. Als het artikel voor de zoveelste keer herschreven moest worden, kon jij ervoor zorgen dat ik even afstand nam en op een ander moment weer verder kon schrijven. Ik heb genoten van de fietsvakanties die jij voor ons uitstippelde. En al zijn het geen “luiervakanties”, ik kom altijd met veel energie en mooie herinneringen thuis. Onze volgende fietsreis door Chili en Argentinië zie ik als een mooie afsluiting van deze periode en ik verheug me op alle avonturen, die wij samen nog gaan beleven.

CHAPTER 10

CURRICULUM VITAE



Maartje Loeffen is geboren op 20 december 1980 in Ravenstein. In 1999 behaalde zij haar vwo-diploma aan het Lindenholt College te Nijmegen.

In datzelfde jaar startte zij met de opleiding Psychologie aan de Katholieke Universiteit Nijmegen, waar zij in 2003 cum laude afstudeerde als arbeids- en organisatiepsychologe.

Van 2003 tot 2009 studeerde zij Geneeskunde aan de Radboud Universiteit Nijmegen. Na haar artsexamen werkte zij 4 maanden als arts-assistent Psychiatrie bij Vincent van Gogh in Venray.

Daarna begon zij met de huisartsopleiding aan de VOHA in Nijmegen. Na haar eerste opleidingsjaar bij huisartspraktijk Peters in Bemmelen startte zij als aiotho (arts in opleiding tot huisarts en onderzoeker) en combineerde daarmee haar opleiding tot huisarts met een promotieonderzoek. Gedurende haar verdere huisartsopleiding werkte ze op de spoedeisende hulp van het Maasziekenhuis Pantein in Boxmeer, verpleeghuis Margriet in Nijmegen en Wijkgezondheidscentrum Lindenholt in Nijmegen. In december 2013 rondde zij haar opleiding tot huisarts af en startte zij als waarnemend huisarts in de regio Nijmegen. Sinds maart 2015 werkt zij als huisarts in de regio's Hoorn en Alkmaar.

Maartje woont samen met Hartger Griffioen en zijn kinderen Yur, Raafi en Maeren in Bergen (Noord-Holland).

