

Radboud University Medical Centre-Department of
Primary and Community Care- Gender & Women's Health

Author: Charlotte Meester

Supervisors: Dr. Sylvie Lo Fo Wong, Drs. Elza Zijlstra,
Prof. Dr. Toine Lagro-Janssen

Student number 0835927

Aug-Oct 2014



CENTRUM
SEKSUEEL EN FAMILIAAL
GEWELD NIJMEGEN

THE CENTRE FOR SEXUAL AND FAMILY VIOLENCE NIJMEGEN: TWO YEARS OF PROVIDED CARE

Word count: 3301

Abstract: 299

References: 33

Appendix: 1

Abstract

Background: In the Netherlands, the prevalence of sexual and family violence is high. Sexual and family violence have negative consequences on the health of victims. Unfortunately, the care for victims is scattered. In October 2012 the Centre for Sexual and Family Violence Nijmegen was opened to improve the care for the victims of sexual and family violence.

Objective: To examine the patient-, assault- and care characteristics of the patient population of the Centre SFVN.

Methods: Data was collected out of the medical and follow up files of the patients who visited the Centre SFVN between October 2012 and August 2014. Analysis was done in SPSS using descriptive statistics.

Results: Fifty-nine victims were included, twenty-nine victims of acute sexual violence and thirty of family violence. Most victims were women with a mean age of 30.1 years (SD=16.6). Noticeable findings were that fifteen percent of victims had an intellectual disability, that a quarter of acute sexual violence victims had a psychiatric disorder and that four victims of family violence were pregnant. Perpetrators were mostly adult men acting alone. Most victims knew their perpetrator (68%). The police was involved in over 80% of acute sexual violence. Forty-five percent of the acute sexual violence victims intended to make an official report. In family violence victims, the police was involved in nearly two third of the cases. A third of family violence victims had the intention to make an official report. About a third of all patients received follow up care.

Conclusions: We found three groups that caught attention: victims with an intellectual disability, victims with psychiatric disorders and pregnant women. Awareness of these three groups needs to be present with the ED physicians and the GPs. Further research is needed to understand why so many victims in the acute setting do not appreciate care from the case managers.

Introduction

The prevalence of sexual abuse and domestic violence worldwide is high(1). Sexual violence is defined as: any sexual act directed against a person's sexuality using coercion, in any setting(2). Family and domestic violence is any intentional or impulsive violent, threatening, coercive or controlling behavior that occurs in the domestic circle of the victim(3).

Worldwide, 35 percent of women have been a victim of either physical and/or sexual violence by an intimate partner or sexual violence by a non-partner(1). In The Netherlands one out of three women and one out of twenty men are confronted with sexual violence at least once in their lives(4). Approximately 12 percent of Dutch women and 3 percent of Dutch men are raped once in their lives(4). An estimated 200.000 women each year are victims of domestic violence in the Netherlands(5).

Victims experience a wide range of negative health consequences, which can be physical and/or psychological. Often diagnosed are: sexual transmitted diseases, unwanted pregnancies, unexplained physical complaints, post traumatic stress disorder, depression and anxiety disorders(1, 6-10). Victims who did not receive adequate care are more likely to be secondary victimized and for men to be a perpetrator in later life(7, 11).

When looking for care, victims face many difficulties, which range from feelings of shame and unawareness of the consequences of the violence to not knowing where to find it(4, 12, 13). In the Netherlands only half of the people receive appropriate care after sexual violence(4). Another problem is that the care providers involved (medical, legal, forensic) do not always properly cooperate(4, 13-15).

To improve the acute care for victims and the collaboration of the different care providers involved, a Centre for Sexual and Family Violence Nijmegen (Centre SFVN) was launched in October 2012. The Centre SFVN offers medical care to victims of acute violence and if asked for police and forensic assistance. All victims are offered post-assault care. The Centre SFVN focuses on both victims of sexual violence and of family violence. This is important, because sexual and family violence often exist together(4).

By getting insight into the victims entering the Centre SFVN it might be possible to improve the care and to get a better view of the needs of the victims of both sexual and family violence. Therefore we studied the characteristics of the patients, of the perpetrators and the care received at the Centre SFVN.

Methods

Setting

Acute care at Emergency Department

The Centre SFVN offers acute medical care for victims of sexual and family violence at the Emergency Department (ED) of the Radboud University Medical Centre Nijmegen. Nijmegen is a midsized town with approximately 168.000 inhabitants, 12.000 being students, in a rural area of the Netherlands. Victims will be offered help at the Centre SFVN if acute sexual violence has taken place in the past seven days and acute family violence in the past 24 hours or when care at the ED is needed. The protocol developed by the Centre SFVN has the following steps: 1. Provide acute medical care (including testing and treating sexually transmitted diseases); 2. Pregnancy counseling; 3. Provide information concerning legal steps and contacting the police; 4. Forensic medical examination; 5. Assess safety of the patient and her/his children; 6. Inform the patient about the follow up care of the Centre SFVN; 7. Inform the general practitioner (GP) of the patient about the visit to the Centre SFVN. All care at the ED is provided by physicians and nurses of the ED except for the forensic examination. If needed, specialists are called in for consultation. If the victim intends to report to the police, the police comes to the ED to give information about the procedure of reporting. The formal report has to take place at the police office.

[Follow up care at University Health Centre for Primary Care](#)

The first workday after visiting the Centre SFVN, a case manager contacts the patient by phone. She invites the patient for an appointment at the University Centre for Primary Health Care. Follow up care consists of emotional and practical support. Practical support can be provided by helping to find a suitable referral to judicial, medical or mental health professionals.

Besides the acute and follow up care the centre also provides in a consultation function. A GP specialized in sexual and family violence can be contacted by health professionals and patients for advice.

Study design

We studied the socio-demographic, assault and (post-assault) care characteristics by performing a quantitative file analysis of the patients who attended the Emergency Department (ED) of the Radboud University Medical Centre Nijmegen with sexual violence and/or family violence, between October 2012 and August 2014.

Measurements

Out of the medical records the following characteristics were entered in a database in SPSS.

Patient characteristics:

- Demographic characteristics: age, sex, housing situation;
- Specific characteristics: intellectual/physical disabilities, psychiatric condition, prostitution, pregnancy, use of medication, experienced violence in the past, current presence of help; involvement of Child Protection Services.

Assault characteristics:

- Characteristics of the incident: time, place, physical/verbal/sexual violence;
- Characteristics of perpetrator: age, sex, relation to the victim.

Care characteristics:

- Referral characteristics: time of referral, who referred;
- Characteristics of medical care: testing and presence of STD's, genital wounds, non-genital wounds, involved physicians/medical specialists ;
- Characteristics of forensic and police: medical forensic examination, involvement of police, reporting to the police;
- Follow up care characteristics: number of contacts with the case manager, type of follow up care received, involvement of Child Protection Services.

Subjects

All patients who attended the ED of the Radboud University Medical Centre Nijmegen with sexual abuse and/or family violence between October 2012 and August 2014 and were treated by an ED physician were included. Patients were included when the sexual violence happened within one week and/or family violence happened within 24 hours or when they had injuries that needed treatment at an ED. During this period 78 patients who had been a victim of sexual abuse and/or family violence came to the ED of the Radboud University Medical Centre Nijmegen. Victims of family violence under 18 years of age were excluded, since the Radboud University Medical Centre Nijmegen refers these children to a special Child Abuse Committee within the hospital. Victims under 18 years of age that are victims of sexual violence within the family are included. Medical files of 13 patients were untraceable, due to the fact that not all patient identification numbers were actively archived in the early beginning of the Centre SFVN. Four patients were excluded although there was a clear suspicion of family violence, because there was no evidence of family violence reported in the medical files. And since they were not referred to the case managers we could not get more information in hindsight. A total of 59 patients remained (Appendix I).

Data collection

The data was collected out of the medical files of the ED and the files of the case managers of the 59 patients. We made a list of all characteristics we wanted to research based on the literature(16). All data was made anonymous by deleting the hospital identification numbers, birthdates and arrival dates. The anonymous data was entered in a database in SPSS.

Data analysis

For analysis we divided the victims into two groups; acute sexual violence and family violence. We used descriptive statistics in SPSS (IBM SPSS Statistics for Windows, Version 20.0.).

Results

Patient characteristics

Of the 59 patients; 29 were a victim of acute sexual violence and 30 were a victim of family violence (Table 1). The mean age of the sexual violence victims was 25.6 years (SD=13.9). The mean age of the family violence victims was 34.5 years (SD=18.0).

Of a total of 9 patients (15.3%) it was known that they had an intellectual disability.

Four victims of family violence were pregnant at the time of the violence.

More than a third of the acute sexual violence victims used psychotropic medication; mostly antidepressants and/or antipsychotic drugs and tranquilizers. In the group of family violence, five people used psychotropic medication.

Prior sexual or family violence was noticed in the files of four patients.

Acute sexual violence victims made in 17.2% use of mental health services and in 13.8% of Child Protection Services. Two victims of family violence used mental health services.

Table 1: Background characteristics of the patients who visited the acute centre SFG by type of violence

	Acute sexual violence		Family violence	
	% (N)	N=29	% (N)	N=30
Gender				
Women	100.0	(29)	90.0	(27)
Men	0.0	(0)	10.0	(3)
Age				
< 12 years	6.9	(2)	10.0	(3)
12-17 years	34.5	(10)	10.0	(3)
18-25 years	17.2	(5)	16.7	(5)
26-39 years	20.7	(6)	23.3	(7)
40-65 years	20.7	(6)	36.7	(11)
> 66 years	0.0	(0)	3.3	(1)
Intellectual disability	10.3	(3)	20.0	(6)
Living situation				
Living alone	17.2	(5)	3.3	(1)
Living with partner	0.0	(0)	46.7	(14)
Living with parents	31.0	(9)	16.7	(5)
Homeless	6.9	(2)	0.0	(0)
Foster or institutional care	13.8	(4)	10.0	(3)
Living with family members	3.4	(1)	3.3	(1)
Unknown	27.6	(8)	20.0	(6)
Prior sexual or family violence				
Sexual violence	6.9	(2)	3.3	(1)
Family violence	3.4	(1)	0.0	(0)
Unknown	89.6	(26)	96.7	(29)
Use of prescribed medication				
Psychotropic medication	55.2	(16)	33.3	(10)
Contraception	34.5	(10)	16.7	(5)
Contraception	27.6	(8)	10.0	(3)
Pregnant at time of incident	0.0	(0)	13.3	(4)

Pre-existing use of care		
Mental health care	17.2 (5)	6.7 (2)
Social work	6.9 (2)	3.3 (1)
Child protection services	13.8 (4)	3.3 (1)

Perpetrator and assault characteristics

Besides three female perpetrators of family violence, all perpetrators were adult males (Table 2). In 90% of all cases the perpetrator acted alone. Victims of acute sexual violence were mostly assaulted by someone they knew. In case of family violence the perpetrators were mostly partners or former partners of the victim.

In 72.2% of acute sexual violence cases penetration occurred. Physical violence was present in half of the family violence cases.

Overall frequently found injuries were contusions (15.3%) and cuts or lacerations (13.6%). Injuries were mostly sustained by the family violence victims. Three victims of family violence were diagnosed with a traumatic brain injury, four had a fracture and eight people had excoriations or bruises. In eleven medical files of acute sexual violence victims, it was documented that the forensic medical examiner did the physical examination of the patient. Of these patients the injuries were not documented in the medical files.

Table 2: Perpetrator and assault characteristics by type of violence

	Acute sexual violence		Family violence	
	% (N)	N=29	% (N)	N=30
Type of sexual violence				
Vaginal penetration	51.7	(15)		
Oral penetration	3.4	(1)		
Anal penetration	0.0	(0)		
Combination	17.2	(5)		
No penetration	20.7	(6)		
Unknown	6.9	(2)		
Type of family violence				
Sexual			26.7	(8)
Physical			40.0	(12)
Verbal			10.0	(3)
Combination			20.0	(6)
Other			3.3	(1)
Gender				
Female	0.0	(0)	6.7	(2)
Male	100.0	(29)	90.0	(27)
Female and male	0.0	(0)	3.3	(1)
Age				
<12 years	0.0	(0)	0.0	(0)
12-18 years	3.4	(1)	0.0	(3)
>18 years	65.5	(19)	80.0	(24)
Unknown	31.0	(9)	10.0	(3)
Number of perpetrators				
1	89.7	(26)	93.3	(28)
>1	10.3	(3)	6.7	(2)
Relationship to victim				
Peer	3.4	(1)	0.0	(0)
Intimate partner	0.0	(0)	53.3	(16)
Former intimate partner	0.0	(0)	23.3	(7)
Family member	0.0	(0)	20.0	(6)
Met at party	6.9	(2)	0.0	(0)
Acquaintance	24.1	(7)	3.3	(1)
Internet contact	13.8	(4)	0.0	(0)
Human trafficking	3.4	(1)	0.0	(0)
Prostitution	3.4	(1)	0.0	(0)
Stranger	37.9	(11)	0.0	(0)
Unknown	6.9	(2)	0.0	(0)

Sustained injuries		
None	51.7 (15)	6.7 (2)
Contusion	3.4 (1)	40.0 (12)
Genital laceration	10.3 (3)	3.3 (1)
Cut/ knife wound	0.0 (0)	20.0 (6)
Fracture	0.0 (0)	13.3 (4)
Traumatic brain injury	0.0 (0)	10.0 (3)
Excoriation	3.4 (1)	10.0 (3)
Unknown	37.9 (11)	6.7 (2)

Care characteristics

Acute care at Emergency Department

More than half of the acute sexual violence victims were referred to the ED by the police and visited within 72 hours after the incident (Table 3). Of the victims of family violence referral to the ED was mostly by themselves or by the police, 70% of them visited within 24 hours after the incident.

The ED physicians consulted an infectious disease specialist in three quarters of the acute sexual violence victims. HIV post-exposure prophylaxis was administered to almost half of the victims of acute sexual violence. In four cases of family violence victims a neurologist was consulted concerning a head injury and in six cases an infectious disease specialist was consulted.

The four pregnant women with family violence were referred to an out-patient clinic obstetrics-gynecology. The pediatrician was consulted in four cases of acute sexual violence and in one of family violence.

In all cases the GP of the victim was informed by the ED physician.

Police

The police was involved in over 80% of acute sexual violence. In around two third of these cases a forensic medical examination took place. About half of the victims of sexual violence had the intention to officially report to the police. In family violence victims, the police was involved in nearly two third of the cases and of seven of these victims a forensic medical examination took place. On the ED, a third of family violence victims had the intention to make an official report to the police.

Follow up care at University Health Centre for Primary Care

Around 70% of all patients were contacted by a case manager. Almost 60% of them said they did not want or need care from a case manager. Reasons named were that they had enough help already, that they arranged help of another organization or that follow up care was arranged by the pediatrician. Pre-existing help (Table 1) was often either by mental health services or by an organization in assisted living. Patients who arranged their own help often contacted an organization specialized in victim support.

In around 30% of all cases the patient was not contacted by the case manager or contact was not possible. Reasons are that the contact information was not faxed to the case managers, that the patient said to the ED physician that they did not want the case manager to contact them or that the faxed contact information was wrong.

Patients who appreciated care of the case managers, were mostly acute sexual violence victims. Over half of the follow up care receivers had a face to face consult with a case manager and everyone had one or more phone contacts with a case manager. Three victims were referred to a mental health specialist and two were referred to an organization specialized in victim support. In all cases the case manager made contact with the general practitioner of the victim.

Table 3: Acute en follow up care characteristics by type of violence

	Acute sexual violence		Family violence	
	% (N)	N=29	% (N)	N=30
Referred to Emergency Department by				
Self-referral	10.3	(3)	40.0	(12)
Police	58.6	(17)	33.3	(10)
General Practitioner	20.7	(6)	10.0	(3)
112 call*	3.4	(1)	13.3	(4)
Other	6.9	(2)	3.3	(1)
Time between incident and arrival at ED				
< 24 hours	34.5	(10)	70.0	(21)
24-72 hours	51.7	(15)	16.7	(5)
3-7 days	13.8	(4)	6.7	(2)
>1week	0.0	(0)	6.7	(2)
Medical specialists involved at ED				
Infectious disease specialist	75.9	(22)	20.0	(6)
Gynecologist	0.0	(0)	3.3	(1)
Pediatrician	13.8	(4)	3.3	(1)
Surgeon	0.0	(0)	6.7	(2)
Neurologist	3.4	(1)	13.3	(4)
Psychiatrist	3.4	(1)	3.3	(1)
STD screening				
Yes	41.4	(12)	13.3	(4)
No	24.1	(7)	13.3	(4)
Unknown	34.5	(10)	10.0	(3)
Pre-scribed drugs administered day0				
None	13.8	(4)	46.7	(14)
Antibiotics	10.3	(3)	10.0	(3)
Hepatitis B immunization	62.1	(18)	10.0	(3)
HIV post-exposure prophylaxis	48.3	(14)	0.0	(0)
Tetanus vaccine	6.9	(2)	26.7	(8)
Emergency contraception	24.1	(7)	10.0	(3)
Pain medication	0.0	(0)	6.7	(2)
Unknown	0.0	(0)	10.0	(3)
Police				
None	10.3	(3)	33.3	(10)
Police involvement	86.2	(25)	63.3	(19)
Forensic medical examination	58.6	(17)	23.3	(7)
Intention of officially reporting to police	44.8	(13)	33.3	(10)
Unknown	3.4	(1)	3.3	(1)
Involvement of case managers				
Yes, received follow up care	44.8	(13)	13.3	(4)
Yes, after contact patient didn't requested any help	44.8	(13)	40.0	(12)
No	10.3	(3)	46.7	(14)

* 112 call: call to Emergency number

Discussion

When comparing the characteristics of the acute sexual violence victims with those of the family violence victims similarities are: female gender and adult male perpetrators, which is consistent with literature(17-19). In contrary to family violence victims, acute sexual violence victim mostly are of an adolescent age, psychiatric disorders are reported more often, the police is involved in more cases and follow up care is more appreciated. Characteristics of family violence victims that stand out are, the four pregnant women, the six people with an intellectual disability and the finding that more injuries are sustained. On the ED an estimated amount of 11-30% of injuries of women are caused by an intimate partner(8). So it is important for ED employees to try to identify family violence.

Three groups are raising interest: victims with an intellectual disability, victims with psychiatric disorders and pregnant women. In the medical files of fifteen percent of our victims an

intellectual disability is reported, without mention of the severity of their disability. In the Netherlands an estimated 2.5% of the population has a severe intellectual disability and 12.5% has a mild intellectual disability(20). Due to gaps in documentation and difficulties in diagnosing in the acute setting, there might be more people with a mild intellectual disability in our population. In other studies having a disability, either intellectual or physical, is described as a risk factor for sexual and family violence(21, 22). This emerges from being increasingly dependent on others and having a lower socio-economic status(21, 22). A Dutch study found that 61% of women and 23% of men with an intellectual disability have once been a victims of sexual violence(23). Unfortunately, research on the prevalence of violence on victims with an intellectual or physical disability is scarce(24). Preventative measures need to be present from a young age on, aiming to enhance the resilience of people with an intellectual disability. These measures can consist of giving information about sexuality, enhancing (sexual) confidence, enhancing assertiveness and recognizing and acknowledging boundaries(23).

A quarter of all victims suffer from a psychiatric disorder and use prescribed psychiatric medication. Other studies confirm this finding (16, 25). A recent systematic review addresses that especially people with mental illnesses are most vulnerable to violence (24).

Four victims of family violence are pregnant at the time of the violence. Other studies find that current IPV is present in between 5% and 20% of pregnancies (26-28). There is conflicting evidence on whether IPV increases or decreases during pregnancy(29) Pregnant victims have a higher prevalence of complications during pregnancy, examples are anemia, hypertension, preterm labor and more operative deliveries (30, 31). Early recognition might lead to less complications.

The documentation of prior experiences with violence at the ED, in our study is scarce. It might be that this question is not asked regularly or that asking the question is not reported regularly at the ED. Other studies describe prior violence to be present in the majority of cases of sexual and family violence (16, 32). To protect victims from becoming a victim of violence again, it is important to know prior victimization(7, 11).

Most victims know their male perpetrator, as also found in other studies(4, 18). Over a third of the acute sexual violence victims marked their perpetrator as stranger. Also a study in Denmark found that 31% of sexual violence victims did not know their perpetrator(17). The percentage of victims not knowing their perpetrator might be lower since victims might not always tell the actual context of the acute sexual violence in the acute setting.

Most acute sexual violence victims were referred to the ED by the police, so the police was their entry point for seeking help. One of the goals of the Centre SFVN is to provide care for all victims. With this in mind we expected a higher percentage of patients visiting the ED immediately on their own. This might change when there is more familiarity with the Centre SFVN in the community.

It is noticeable that many victims of family violence do not want police involvement. A third of the family violence victims have the intention to officially report to the police. And around 50% of victims of acute sexual violence have the intention to officially report to the police. The numbers of the intention of reporting acute sexual violence are comparable to those found in another Dutch study of a sexual assault centre(16). In the Netherlands 12.4% of women and 4.7% of men who were victims of sexual violence reported to the police(4), in comparison to these percentages the number of intentional reports of the Centre SFVN is higher than can be expected. The higher percentage of intentions of reporting acute sexual violence to the police might be due to the close collaboration between the police and the Centre SFVN.

When looking at the follow up care by the case managers it is noticeable that a large part of all victims say they do not need or appreciate care from a case manager. They either indicate this during the acute care at the ED or during the first phone call of the case manager the day after visiting the ED. Maybe the question comes too soon after the incident. Victims might need more time to recover from the first emotions after the high-impact incident before they can decide upon follow up care. Another reason can be that searching for care is difficult for victims of sexual and family violence(12). This difficulty consists of women being unaware of the negative consequences of

the violence on the well-being of themselves and their surrounding(12). Also feelings of self-blame and the wish to keep the violence a secret create barriers for women to seek help(33).

Strengths and limitations

There is little research available on assault centers. Especially little is known of the characteristics of the patient population of assault centers. We looked at a broad aspect of characteristics, not only the patient characteristics, but also the assault and the acute and follow up care characteristics. Another strength of this study is the fact that it is one of the first studies to combine acute sexual violence and family violence.

Since there is a limited amount of research available, it is difficult to compare our results to other studies. Another limitation of this study is the small amount of victims. Unfortunately, by logistical reasons we lost thirteen patients. The fact that our list of items to research was based on literature makes it not entirely representative for the situation of the Centre SFVN. Therefore multiple documentation gaps are present. Also, our results might not be representative for the rest of the Netherlands, so the results have to be extrapolated with care.

Practical implications

Three groups are raising interest: victims with an intellectual disability, victims with psychiatric disorders and pregnant women. Awareness of these three groups is needed at the ED. The case managers have to be able to make their follow up care suitable for these patients. The GPs might be able to work more preventative when being aware of these groups. Especially asking about family violence during pregnancy is important, not only because of the extent of its prevalence but also because of the higher prevalence of complications during pregnancy in abused women.

Gaps in documentation we came across regarded prior victimization, intellectual disability, mental health issues, pregnancy and sustained injuries. This can be resolved by implementing a list with representative items. With the implementation of this list with, the assessment of risk factors can become more complete. Adequate documentation of sustained injuries, including photographs can be helpful for the prosecution of the perpetrators. Improvement of care is needed in especially family violence victims by better identification at the ED and by encouraging follow up care. The Centre SFVN has to become more familiar in the community. This can be done by spreading leaflets and organizing events for local aid agencies. Further research is needed to understand why so many victims in the acute setting say they do not need or do not appreciate care from the case managers.

References

1. WHO. Global and regional estimates of violence against women: prevalence and health effects of intimate partner violence and nonpartner sexual violence. Geneva: World Health Organisation, 2013.
2. WHO. Violence against women – Intimate partner and sexual violence against women. . Geneva: World Health Organization, 2011.
3. Trimbos-instituut. Multidisciplinaire richtlijn: Familiaal Huiselijk Geweld bij kinderen en volwassenen-Richtlijn voor de diagnostiek en behandeling van familiaal huiselijk geweld bij kinderen en volwassenen [Multidisciplinary guideline: Family Domestic Violence in children and adults-Guideline for the diagnosis of and treatment of famil domestic violence in children and adults]. Utrecht: Trimbos-instituut en kwaliteitsinstituut voor de gezondheidszorg CBO, 2009.
4. Bakker F, Graaf Hd, Haas Sd, Kedde H, Kruijer H, Wijzen C. Seksuele gezondheid in Nederland 2009 [Sexual health in the Netherlands 2009]. Utrecht: Rutgers Nisso Groep, 2009.
5. Veen H, van der Bogaerts S. Huiselijk geweld in Nederland: Overkoepelend syntheserapport van het vangst-, hervangst-, slachtoffer- en daderonderzoek 2007-2010. [Domestic violence in the Netherlands: an overview of the catch, recapture, victim and perpetrator from 2007 to 2010]. Utrecht: Movisie, 2010.

6. Campbell JC. Health consequences of intimate partner violence. *Lancet*. 2002;359(9314):1331-6. Epub 2002/04/20.
7. Tjaden P, Thoennes N. Extent, Nature, and Consequences of Intimate Partner Violence- Findings From the National Violence Against Women Survey. Washington DC: National Institute of Justice, U.S. Department of Justice, 2000.
8. Black MC. Intimate Partner Violence and Adverse Health Consequences: Implications for Clinicians. *American Journal of Lifestyle Medicine*. 2011;5 (5):428-39. Epub 17 June 2011.
9. Dijk Tv, Flight S, Oppenhuis E, Duesmann B. Huiselijk geweld: aard, omvang en hulpverlening [Domestic violence: nature, extent and assistance]. Den Haag: Ministerie van Justitie, 1997.
10. 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. Epub 2012/04/24.
11. WHO/PAHO. Understanding and addressing violence against women- Sexual violence. Geneva: World Health Organization and Pan American Health Organization, 2012.
12. 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. Epub 2013/01/29.
13. Greeson MR, Campbell R. Sexual assault response teams (SARTs): an empirical review of their effectiveness and challenges to successful implementation. *Trauma, violence & abuse*. 2013;14(2):83-95. Epub 2012/12/29.
14. Ensink B, Berlo Wv. Indringende herinneringen. De ontwikkeling van klachten na een verkrachting. [Intrusive memories: Development of psychological problems after sexual assault]. Utrecht/ Delft: NISSO/ Eburon, 1999.
15. Vanomi M, Lunnemann K, Kriek F, Drost L, Smits van Waesberghe E. Meerwaarde integrale opvang en hulpverlening aan slachtoffers van seksueel geweld. Exploratief onderzoek naar de Centra Seksueel Geweld in Utrecht en Nijmegen [Added value of integrated care and assistance for victims of sexual assault. Explorative study on the Center for Sexual Assault in Utrecht and Nijmegen]. Amsterdam: Regioplan Beleidsonderzoek in samenwerking met Verwey-Jonker Instituut., 2014.
16. Bicanic I, Snetselaar H, De Jongh A, Van de Putte E. Victims' use of professional services in a Dutch sexual assault centre. *European journal of psychotraumatology*. 2014;5. Epub 2014/06/25.
17. Ingemann-Hansen O, Sabroe S, Brink O, Knudsen M, Charles AV. Characteristics of victims and assaults of sexual violence--improving inquiries and prevention. *Journal of forensic and legal medicine*. 2009;16(4):182-8. Epub 2009/03/31.
18. Avegno J, Mills TJ, Mills LD. Sexual assault victims in the emergency department: analysis by demographic and event characteristics. *The Journal of emergency medicine*. 2009;37(3):328-34. Epub 2008/04/09.
19. Gisladdottir A, Gudmundsdottir B, Gudmundsdottir R, Jonsdottir E, Gudjonsdottir GR, Kristjansson M, et al. Increased attendance rates and altered characteristics of sexual violence. *Acta obstetricia et gynecologica Scandinavica*. 2012;91(1):134-42. Epub 2011/09/29.
20. Neijmeijer L, Moerdijk L, Veneberg G, Muusse C. Licht verstandelijk gehandicapt en de GGZ- Een verkennend onderzoek [People with light intellectual disabilities in mental health services- an explorative research] Utrecht: Trimbos instituut, 2010.
21. Brownridge DA. Partner violence against women with disabilities: prevalence, risk, and explanations. *Violence against women*. 2006;12(9):805-22. Epub 2006/08/15.
22. Curry MA, Hassouneh-Phillips D, Johnston-Silverberg A. Abuse of Women With Disabilities An Ecological Model and Review. *Violence against women*. 2001;7(1):60-79.
23. van Berlo W, de Haas S, van Oosten N, van Dijk L, Brants L, Tonnon S, et al. Beperkt Weerbaar- een onderzoek naar seksueel geweld bij mensen met een lichamelijke, zintuiglijke of verstandelijke beperking [Limited Resilient- a research on sexual violence perpetrated on people with a physical, sensory or intellectual disability]. Utrecht: 2011.
24. Hughes K, Bellis MA, Jones L, Wood S, Bates G, Eckley L, et al. Prevalence and risk of violence against adults with disabilities: a systematic review and meta-analysis of observational studies. *Lancet*. 2012;379(9826):1621-9. Epub 2012/03/02.

25. Campbell L, Keegan A, Cybulska B, Forster G. Prevalence of mental health problems and deliberate self-harm in complainants of sexual violence. *Journal of forensic and legal medicine*. 2007;14(2):75-8. Epub 2007/07/26.
26. Rietveld L, Lagro-Janssen T, Vierhout M, Lo Fo Wong S. Prevalence of intimate partner violence at an out-patient clinic obstetrics-gynecology in the Netherlands. *Journal of psychosomatic obstetrics and gynaecology*. 2010;31(1):3-9. Epub 2010/02/04.
27. Gazmararian JA, Lazorick S, Spitz AM, Ballard TJ, Saltzman LE, Marks JS. Prevalence of violence against pregnant women. *Jama*. 1996;275(24):1915-20. Epub 1996/06/26.
28. Cook J, Bewley S. Acknowledging a persistent truth: domestic violence in pregnancy. *Journal of the Royal Society of Medicine*. 2008;101(7):358-63. Epub 2008/07/02.
29. Jasinski JL. Pregnancy and domestic violence: a review of the literature. *Trauma, violence & abuse*. 2004;5(1):47-64. Epub 2004/03/10.
30. Campbell JC. Abuse during pregnancy: progress, policy, and potential. *American journal of public health*. 1998;88(2):185-7. Epub 1998/03/10.
31. Kaye DK, Mirembe FM, Bantebya G, Johansson A, Ekstrom AM. Domestic violence during pregnancy and risk of low birthweight and maternal complications: a prospective cohort study at Mulago Hospital, Uganda. *Tropical medicine & international health : TM & IH*. 2006;11(10):1576-84. Epub 2006/09/28.
32. Elwood LS, Smith DW, Resnick HS, Gudmundsdottir B, Amstadter AB, Hanson RF, et al. Predictors of rape: findings from the National Survey of Adolescents. *Journal of traumatic stress*. 2011;24(2):166-73. Epub 2011/03/23.
33. Beaulaurier RL, Seff LR, Newman FL, Dunlop BD. Internal barriers to help seeking for middle-aged and older women who experience intimate partner violence. *Journal of elder abuse & neglect*. 2005;17(3):53-74. Epub 2006/08/26.

Appendix I:

Flowchart of patients included:

