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Vulnerability and revictimization: Victim characteristics in a Dutch assault center

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ABSTRACT

Sexual and family violence are highly prevalent problems with numerous negative health consequences. Assault centres, such as the Centre for Sexual and Family Violence (CSFV) in the Netherlands, have been set up to provide optimal care to victims. We wanted to gain insight into characteristics of the population that presented to the Centre in order to customize care to their needs. File analysis was conducted of victims who attended the CSFV between 2013 and 2016. Data were analyzed in SPSS. A total of 121 victims entered the Centre, 93% of them being female. Forty-two per cent were adult victims of sexual violence, 28% minor victims of sexual violence and 30% adult victims of family violence. One-third of sexual and two-third of family violence victims had experienced prior abuse. Current use of psychosocial services and psychiatric medication was high, and a cognitive disability was present in 18% of the sexual violence victims. Half the victims reported, but when the perpetrator was a recent contact, e.g., someone met at a party, reporting rates went down. Sexual and family violence victims share characteristics that indicate vulnerability, suggesting that care for both groups might best be combined in one single assault centre. In this way, victims can make use of the same services and knowledge of gender-based violence. One of the major aims of assault centres is to provide psychosocial follow-up care and facilities for reporting. The victims' needs in these matters deserve further research.

1. Introduction

In the Netherlands, one in eight women and one in twenty-five men have ever been raped,[1] and 45% experienced a form of family violence.[2] Sexual and family violence cause numerous negative health problems such as sexually transmitted infections (STIs), pregnancy complications and unwanted pregnancies, depression, post traumatic stress disorder (PTSD), substance abuse and an increased risk of suicide.[3–5]

Unfortunately, many victims do not seek help from legal, medical and mental health services. Victims are afraid that formal systems will not help them or will psychologically harm them.[6] When they do seek formal help, the care provided often does not meet the victims' medical and psychological needs. Victims often perceive the care providers' attitudes and communication as negative.[7] Instead of feeling they are given the opportunity to press charges, they are ashamed, are afraid of the perpetrator and fear they will be blamed by the police, who will probably not take the assault seriously enough.[8,9] Most reported sexual assaults are not prosecuted in court.[7] As a consequence, victims feel misunderstood and miss out on the care they need.

To improve care for victims of violence, assault centres have been set up. In these centres, medical, psychosocial and legal services work together to provide the best possible care. Assault centres report promising outcomes on victims' help-seeking experiences: victims are satisfied with the care providers' attitude; care providers indicate that their communication skills have improved, resulting in a less traumatic care process; legal outcomes appear to improve; and there is enhanced communication among collaborating organizations.[10,11]

A Centre for Sexual and Family Violence (CSFV) was set up in

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Nijmegen in 2012 as one of the first assault centres in the Netherlands. The Centre provides medical, forensic and police care at an Emergency Department. A case manager conducts psychosocial follow-up care to prevent problems such as PTSD, depression and revictimization. Literature on whether or not services for sexual and family violence should be combined shows that these services share needs, goals and expertise, but there is some concern that combined services lead to diminished effectiveness, lack of attention and lack of funding for sexual assault specifically.[12] We believe that care for these victims could be based on the same interprofessional, integrated approach. Both family and sexual violence are considered gender-based violence: both share risk factors and health consequences, and both evoke feelings of fear, shame and guilt and increase the risk of future violence.[13–16] Both victim groups are often characterized by vulnerability, defined as being female, being young, having an intellectual disability or suffering from mental illnesses.[17,18]

We wanted to find out whether our three target groups, namely adult and minor victims of sexual violence and adult victims of family violence, share background characteristics and care needs. Our research questions are: 1. What are the similarities and differences between adult victims of sexual and family violence with regard to vulnerabilities and use of services? 2. What are the similarities and differences between minor and adult victims of sexual assault with regard to vulnerabilities and use of services? 3. Do victim, assault and perpetrator characteristics influence reporting rates? This knowledge of assault centre populations can help existing and new centres to improve their care delivery.

2. Method

2.1. Setting

The study was performed at the Centre for Sexual and Family Violence Nijmegen (CSFV), which provides interprofessional care for victims of sexual and family violence. The CSFV was set up as a collaborative network involving the Emergency Department (ED) of the Radboud University Medical Center, the District Police Department, the Community Health Services and an academic Primary Health Care Centre. Acute care takes place at the ED and is conducted by an ED physician and nurse. Initially, urgent medical care is carried out with attention of preserving traces. Victims are informed about legal proceedings. If victims wish to report, a police officer comes to the Centre to provide information on reporting. If victims consider reporting, a forensic physician is subsequently called in by the police to perform a forensic medical examination. Before victims are examined, the ED physician, police and forensic physician discuss the plan of work in which they aim to keep the burden for the victim as low as possible. The forensic physician takes swabs for STI-testing. After forensic medical examination, the ED physician counsels, tests and takes preventive treatment for STIs, including hepatitis B and HIV; counsels on pregnancy and takes pregnancy measures if necessary; and treats injuries. The victims' safety and that of their children is assessed by the ED nurse. The victims' General Practitioner (GP) is informed by letter. Follow-up medical attention for STIs is carried out by an infectious disease specialist at the Radboud University Medical Centre 2–4 weeks after acute care.

A case manager, based at the academic Primary Health Care Centre, calls victims the day after acute care has been provided. This case manager is in charge of psychosocial follow-up care such as providing psychoeducation and referral to psychosocial or legal help, if necessary. Follow-up care can be done by phone or in face-to-face contacts, depending on the victims' preferences. The case manager screens for PTSD at one month and three months after the incident according to the NICE guidelines.[19] The case manager keeps files, registering the victims' needs and action plans. If victims do not want or need follow-up care, the case manager asks for the reason why and registers this as well. After three months, the case manager usually transfers the care to the victims' GP.

2.2. Subjects and study design

The study is a file analysis of victims of who presented to the Centre for Sexual and Family Violence, using the medical files, follow-up files, district police reports and forensic examiners' files. Female and male victims of acute sexual violence of all ages, and female and male victims of family violence aged ≥18 years old who presented to the Centre between January 2013 and January 2016 were included. Acute sexual violence was defined as the assault happening ≤7 days ago as traces can be preserved and STI measures can be taken up until seven days after the event. Acute **family** violence was defined as physical violence conducted by an ex partner, partner or family member, which happened less than 24 h ago and/or needed ED treatment. The emphasis on physical violence ≤24 h ago and/or needing ED treatment was chosen to stress the Centre's focus on a need for acute, emergency medical treatment. If an acute **sexual** assault by an ex partner, partner or family member was the only and main reason for attending the Centre, we categorized these victims among the sexual violence victims.

The treatment of physical and emotional family violence for victims aged <18 years old was covered by another protocol at the hospital and was not conducted by CSFV staff. Minor victims of family violence, therefore, were excluded from this study.

2.3. Measurements and definitions

A registration form was developed based on the expertise of the supervising committee (the authors) and previous literature.[20] The registration form contained items on background, assault and perpetrator characteristics and use of services. The background characteristics focused on vulnerabilities, such as previous abuse and use of psychiatric medication.

The following definitions were used for background characteristics: 'Having an intellectual disability' was noted as 'yes' if an intellectual disability was mentioned in the ED file. The ED based this knowledge on prior medical files, information of the person accompanying the victim or the place of residence being known to give care to intellectually disabled persons. 'Prior sexual or family violence' was defined as having experienced ≥1 event of sexual and/or family violence before entering the CSFV by the same or a different perpetrator, in childhood or adulthood. 'Psychiatric medication' included antidepressants, antipsychotics, anxiolytics/hypnotics, mood stabilizers and stimulants. 'Current use of psychosocial services' included the services victims used at the time they entered the CSFV, such as social work, psychologist, psychiatrist, Child Protection Services, living in an institution and/or assisted living.

The following definitions were used for assault and perpetrator characteristics: 'Penetration' included vaginal and/or oral and/or anal penetration. In the case of children, 'Penetration' included penetration of the vulvar vestibule. 'Psychological violence' consisted of victims feeling unsafe with the perpetrator or being threatened with or without a weapon. If the assault took place in the victim's or perpetrator's house, we defined this as 'Private location'; if it took place in streets, parks, cars, clubs, parties and woods, it was defined as 'Public location'. 'Alcohol/drug use before the assault' was established by anamnesis or by clinical estimation at the ED and not confirmed by bio-specimen. This included victims

who suspected they had been drugged and/or victims with sudden blackouts after they had had a drink. As for the perpetrators, we considered friends, acquaintances, colleagues, partners, ex-partners and first- and second-degree relatives as a 'Close contact'. A 'Recent contact' was a perpetrator who the victim met for the first time less than 24 h ago, e.g., at a party, in a club, on the street, on the Internet or via prostitution. A 'Stranger' was someone who the victim had never met before the assault.

The following definitions were used for service characteristics: 'Police contact' was noted as 'yes' when the police was somehow informed about the assault, mostly by phone. Police contact did not necessarily mean that the police informed the victim about reporting or took a report – it could also mean they referred a victim to the Centre and subsequently withdrew. Reporting rates included '*ex officio* prosecution', meaning that the authorities pursued the case regardless of what the victim wanted. When 'Received follow-up care' was registered as 'yes', this meant that the victim had had at least one phone call or face-to-face contact with the case manager or that follow-up care was arranged by hospital staff during acute care.

We used 'minor' for victims aged <18 years old and 'adult' for victims aged ≥18 years old.

2.4. Data collection and analysis

The data were collected from the medical, forensic and follow-up care files and the official police reports about the present contact. One researcher (GE) examined the medical and follow-up files. The characteristics 'police contact' and 'pressing assault charges' were retrieved from police reports by a police officer specially selected for this study. Reasons for not reporting were registered by the police. A forensic physician specially selected for this study collected data from the forensic files. The data from the registration forms were imported in SPSS version 22. Analyses and statistical calculations were done in SPSS. We used chi-square tests to compare victims of sexual and family violence aged ≥18 years old; and victims of sexual violence aged <18 and ≥ 18 years old. We used a univariate logistic regression model to assess the relation of gender, age, having an intellectual disability, prior sexual and/or family violence, current use of psychosocial services and victim-perpetrator relationship with reporting to the police. We applied a multivariate logistic regression model to assess the independent relation of these variables with reporting to the police. We did this analysis separately for sexual and family violence. For family violence perpetrator was excluded from the model because this was always a person known to the victim. The age groups were divided into three categories: < 18, 18–25 and ≥ 25. P-values of <0.05 were considered significant.

2.5. Social and ethical justification

The Radboud University Medical Ethics Committee gave permission for this study (19th of March 2015, file number 2012-1218). The Dutch Ministry of Security and Justice gave permission to examine the police and forensic files (9th of September 2015, file number PaGlBJZ 48362). The database in SPSS was fully anonymized. The database was saved on a computer to which only EZ had access. The registry forms were stored in a secure data storage archive.

3. Results

In its first three years, 121 victims of acute sexual and/or family violence presented to the Centre for Sexual and Family Violence (Table 1). Seventy per cent of these had experienced sexual violence. Their male-female ratio was 1:16. Forty per cent were minor victims. The majority of victims had undergone vaginal, oral and/or anal penetration. One in five had been assaulted by more than one perpetrator.

Thirty per cent was a victim of family violence with a male-female ratio 1:11. Most victims of family violence presented with injuries such as bruises and fractures in the head/neck/face area. One in seven suffered from traumatic brain injury with unconsciousness.

Fig. 1 gives an overview of the victims who attended the CSFV and the services they made use of.

3.1. Similarities and differences between adult victims of sexual and family violence

Out of the 87 adult victims, 51 were victims of sexual violence, and 36 were victims of family violence (Table 1). Nearly all victims were female. One-third of the sexual violence victims had experienced prior sexual or family violence. Eighteen per cent of the sexual violence victims had an intellectual disability, and almost one-third used psychiatric medication. Half the victims of sexual violence used psychosocial services upon entering the CSFV. All perpetrators were men. Twenty-nine per cent were close contacts; 39% were recent contacts; and 31% were strangers. More than half the victims were raped in the perpetrator's or victim's home. A quarter of the family violence victims had used alcohol and/or drugs before the assault. This percentage was 37% for the sexual violence victims. The majority of them (n = 16) experienced a so-called Drug-Facilitated Sexual Assault (DFSA), defined as sexual activity occurring when consent is invalid or absent due to the effects of drugs, including alcohol.[21] A forensic medical examination was performed in 67% of cases. Almost all sexual violence victims returned home after receiving care at the ED.

Follow-up care was received in 78% of the sexual violence victims. Twenty per cent did not receive follow-up care because victims had explicitly indicated during acute care that they did not want the Centre's further help or because victims could not be reached for practical reasons, such as a wrong telephone number. Reasons for not wanting help included victims who wanted to digest the incident on their own or already received adequate help.

Six out of ten adult victims of family violence had experienced prior violence, a significantly higher figure than that for adult victims of sexual violence, which can be explained by the fact that family violence is often a structural problem. Use of psychiatric medication and current use of psychosocial services were similar to the sexual violence group. Perpetrators were virtually all current partners. The incidents mostly took place in a private setting. A quarter of the victims of family violence had used alcohol or drugs, which was similar to sexual violence victims. Victims of family violence were admitted to hospital more often than victims of sexual violence. A forensic medical examination was hardly ever performed in victims of family violence in contrast to victims of sexual violence. The percentage of family violence victims who received follow-up care was lower than that of sexual violence victims, but the difference was not significant.

3.2. Similarities and differences between minor and adult victims of sexual violence

Out of the 85 victims of sexual violence, 34 were minors. One in three minor victims had experienced prior abuse, the same percentage as that for adults. A quarter of them lived in residential or foster care. The percentage of 18% intellectually disabled victims was the same as in adult victims. Minor victims used psychiatric medication significantly less often than adult victims. The

Table 1
Differences between background, assault and received care characteristics of sexual and family violence victims (N = 121).

	Sexual violence ≥ 18 years old (N = 51)	Family violence ≥ 18 years old (N = 36)	Sexual violence <18 years old (N = 34)	Chi^2 P-value sexual versus family violence ≥ 18 years old	Chi^2 P-value sexual violence <18 versus ≥ 18 years old
Background characteristics	N (%)	N (%)	N (%)		
Gender				0.657	1.00
Female	48 (94.1)	33 (91.7)	32 (94.1)		
Male	3 (5.9)	3 (8.3)	2 (5.9)		
Age category				0.184	n.a.
<12	n.a.	n.a.	8 (23.5)		
12-18	n.a.	n.a.	26 (76.5)		
18-25	21 (41.2)	11 (30.5)	n.a.		
26-39	19 (37.3)	10 (27.8)	n.a.		
40+	11 (21.6)	15 (41.7)	n.a.		
Living situation (N = 108)				0.000*	0.000*
Living with partner/family	8 (18.6)	25 (75.8)	24 (75.0)		
Living alone or in student house	26 (60.5)	6 (18.2)	0 (0.0)		
Residential or foster care	6 (14.0)	2 (6.1)	8 (25.0)		
Other	3 (7.0)	0 (0.0)	0 (0.0)		
Registered intellectual disability	9 (17.6)	2 (5.6)	6 (17.6)	0.095	1.00
Prior sexual and/or family violence	16 (31.4)	22 (61.1)	10 (29.4)	0.006*	0.848
Current use of psychiatric medication	16 (31.4)	9 (25.0)	4 (11.8)	0.518	0.037*
Current use of psychosocial services	24 (47.1)	14 (38.9)	21 (61.8)	0.449	0.183
Assault and perpetrator characteristics					
Type of sexual violence	N (%)			n.a.	0.314
Penetration	47 (92.2)	n.a.	29 (85.3)		
No penetration	4 (7.8)	n.a.	5 (14.7)		
Type of family violence				n.a.	n.a.
Physical	n.a.	31 (86.1)	n.a.		
Psychological	n.a.	5 (13.9)	n.a.		
Perpetrator's gender				0.015*	1.00
Male	51 (100.0)	32 (88.9)	34 (100.0)		
Female	0 (0.00)	4 (11.1)	0 (0.00)		
Number of perpetrator(s)				0.065	0.319
1	39 (76.5)	33 (91.7)	29 (85.3)		
>1	12 (23.5)	3 (8.3)	5 (14.7)		
Victim-perpetrator relationship				0.000*	0.009*
Close contact	15 (29.4)	36 (100.0)	21 (61.8)		
Recent contact	20 (39.2)	n.a.	9 (26.5)		
Stranger	16 (31.4)	n.a.	4 (11.8)		
Place of assault					
Private	28 (54.9)	30 (83.3)	25 (73.5)	0.006*	0.082
Public	23 (45.1)	6 (16.7)	9 (26.5)		
Alcohol/drug use before the assault	19 (37.3)	9 (25.0)	9 (26.5)	0.228	0.300
Service characteristics					
Referral source				0.000*	0.072
Self referrer	5 (9.8)	11 (30.6)	3 (8.8)		
Police	34 (66.7)	7 (19.4)	15 (44.1)		
(Mental) health care services	12 (23.5)	18 (50.0)	16 (47.1)		
Accommodation after hospital care				0.013*	0.600
Returned to home	45 (88.2)	23 (63.9)	32 (94.1)		
Admission to hospital	1 (2.0)	8 (22.2)	1 (2.9)		
Friends/family	3 (5.9)	4 (11.1)	1 (2.9)		
Women's shelter	2 (3.9)	1 (2.8)	0 (0.0)		
Legal services					
Police contact	47 (92.2)	20 (55.6)	28 (82.4)	0.000*	0.169
Official report (of N = 108)[a]	23 (47.9)	14 (43.8)	15 (53.6)	0.714	0.634
Forensic medical examination	35 (68.6)	2 (5.6)	17 (50.0)	0.000*	0.084
Follow-up care services					
Received follow up care				0.108	0.927
Yes	40 (78.4)	22 (61.1)	28 (82.4)	0.079	0.658
No	11 (21.6)	14 (38.9)	6 (17.6)		

[a] Data on 13 victims were missing, because the assault had been committed in another police district. *$p < 0.05$.

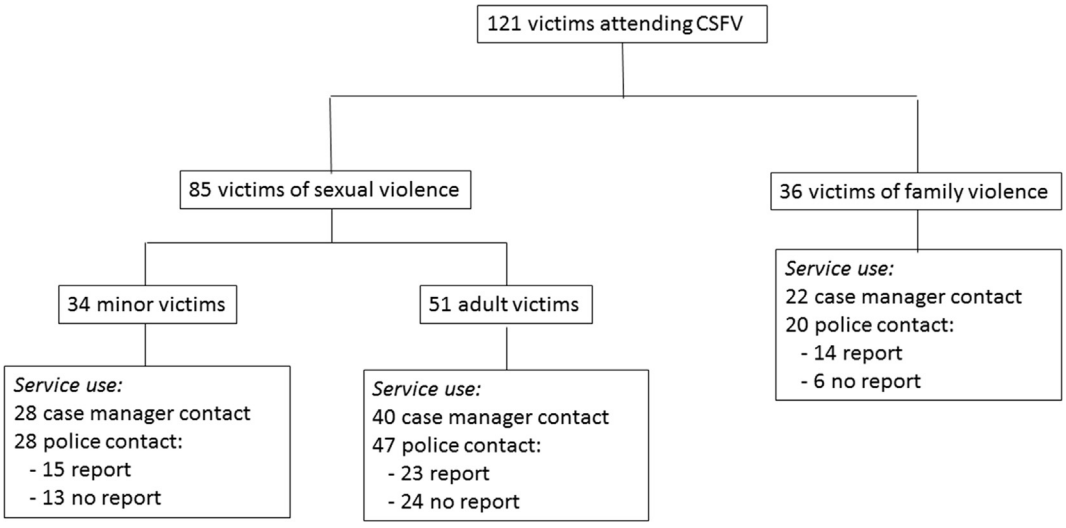

Fig. 1. Flowchart victims attending CSFV and use of services.

involvement of psychosocial services, such as Child Protection Services, before entering the CSFV was higher than in adults: 62% versus 47%. Sixty-two per cent of the minors were assaulted by close contacts, which was significantly higher than among adult victims. Three-quarters of the assaults took place in a private setting, mostly the perpetrator's home. A quarter of minors had used alcohol and/or drugs versus 37% in adult victims. Six of them experienced a DFSA. Half the minors received a forensic medical examination versus 70% in adults. The percentage of minor victims who received follow-up care was similar to that of adult victims.

3.3. Reporting to the police

Nearly 90% of the sexual violence victims had police contact. Of this group, 68% considered reporting. In 25% of the victims who considered reporting, the police discontinued the reporting procedure, mostly because no case for court could be build due to lack of judicial evidence that an offence had been committed according to the law. In nine of these cases, the perpetrator was a recent contact. Of the family violence victims, more than half had police contact.

With no differences between the three groups, half the victims reported to the police. Information on reporting was missing for 13 victims because the assault had been committed in another police district. Due to privacy considerations, the Dutch Ministry of Security and Justice granted permission to access police data from solely the CSFV district by a police officer specially selected for this study. Therefore, we could not access data from other districts. Reasons for not wanting to report were, for sexual violence victims, a strong wish to focus on their (mental) health, the feeling that reporting might cause too much stress or not being sure about what exactly had happened. Family violence victims often did not report, because mental and social care for the family was more needed than reporting. In eight cases, there was an *ex officio* prosecution.

Univariate logistic regression for sexual violence showed that the only variable that significantly influenced reporting rates was the type of perpetrator ($p = 0.005$) (Table 2). The probability of reporting in victims of sexual violence was lower when the perpetrator was a recent contact compared to the perpetrator being a stranger (OR 0.138; CI 0.037–0.523; $p = 0.004$). Univariate logistic regression for family violence showed no significant results. Multivariate logistic regression for female sexual violence victims, which is the majority of victims who attend the CSFV, showed comparable results (Table 3).

4. Discussion

Our most important finding is that victims of sexual violence and family violence show similar characteristics that indicate vulnerability: they are female, have high rates of psychosocial problems and/or intellectual disability and, in many cases, have experienced prior abuse. Remarkably, minor victims of sexual violence show the same characteristics. Despite their young age, a considerable percentage of them have experienced prior violence and have seen the involvement of Child Protection Services. Although we must take caution comparing our data with other Dutch population studies due to differences in definitions and research methods, the percentages of psychotropic medication use, use of psychosocial care and intellectual disabilities appear to be higher than those in the general population, 31%, 47% and 18%, respectively, in the adult CSFV population versus 6%, 11% and 8%, respectively, in the adult general population.[22,23]

Victim vulnerabilities, such as having an intellectual disability, increase the risk of future violence, and this risk is increased even more by the potential consequences of the violent incident, such as PTSD, depression, substance abuse, inadequate coping strategies, distorted sexual development, self-blame, anxiety and shame.[24–26] Repeated violence may lead to cumulative trauma, with devastating effects, such as lifetime PTSD and great interpersonal difficulties.[24] Minors who are victims of sexual violence are at serious risk of revictimization, defined as the occurrence of at least one incident of childhood sexual abuse followed by a subsequent incident of adult sexual victimization.[27] At a later age, they are at risk of Intimate Partner Violence and negative health problems that range from suicide attempts to ischaemic heart disease.[28–30]

Besides similarities, there are also differences between the three target groups. A noticeable difference is the low forensic involvement in victims of family violence. In the Netherlands, there is no tradition in performing forensic medical examinations in victims of family violence, unless it concerns children. Forensic examination focuses more or even fully on trace evidence collection than on injury documentation. This might be a concern since forensic medical examination can help to create a stronger case, for example when victims do not want to testify out of fear. Also without direct

Table 2
Univariate logistic regression analysis showing the association of victim's, assault and perpetrator characteristics with reporting to the police.

Determinants	Reporting to police		Odds Ratio	95% CI	p-value
Sexual violence (N = 76)	Yes n (%)	No n (%)			
Gender					
Female	35 (49.3)	36 (50.7)	Ref		
Male	3 (60)	2 (40)	1.543	0.243–9.800	0.646
Age					0.110
<18	15 (53.6)	13 (46.4)	Ref		
18–25	6 (30)	14 (70)	0.371	0.111–1.247	0.109
>25	17 (60.7)	11 (39.3)	1.339	0.463–3.872	0.590
Cognitive disability					
Yes	8 (57.1)	6 (42.9)	1.422	0.441–4.582	0.555
No	30 (48.4)	32 (51.6)	Ref		
Prior abuse					
Yes	13 (52)	12 (48)	1.127	0.432–2.935	0.807
No	25 (49)	26 (51)	Ref		
Use of psychosocial services before entrance					
Yes	21 (51.2)	20 (48.8)	1.112	0.451–2.741	0.818
No	17 (48.6)	18 (51.4)	Ref		
Perpetrator					0.005*
Known	19 (61.3)	12 (38.7)	0.731	0.218–2.444	
Recent contact	6 (23.1)	20 (76.9)	0.138	0.037–0.523	0.611
Stranger	13 (68.4)	6 (31.6)	Ref		0.004*
Alcohol/drugs use before assault					
Yes	9 (34.6)	17 (65.4)	0.383	0.143–1.026	0.056
No	29 (58)	21 (42)	Ref		
Family violence (N = 32)					
Gender					
Female	12 (41.4)	17 (58.6)	Ref		
Male	2 (66.7)	1 (33.3)	2.833	0.230–34.921	0.416
Age					
18–25	4 (44.4)	5 (55.6)	Ref		
>25	10 (43.5)	13 (56.5)	0.962	0,204–4.539	0.960
Cognitive disability					
Yes	2 (100)	0 (0)	–		
No	12 (40)	18 (60)			
Prior abuse					
Yes	10 (52.6)	9 (47.4)	2.500	0.568–11.011	0.226
No	4 (30.8)	9 (69.2)	Ref		
Use of psychosocial services before entrance					
Yes	6 (50)	6 (50)	1.500	0.355–6.347	0.582
No	8 (40)	12 (60)	Ref		
Alcohol/drugs use before assault					
Yes	5 (62.5)	3 (37.5)	2.778	0.532–14.504	0.226
No	9 (37.5)	15 (62.5)	Ref		

*p < 0.05.

Table 3
Multivariate logistic regression analysis showing the independent association of victim's, assault and perpetrator characteristics of female sexual assault victims with reporting to the police.

Determinants	Adjusted odds Ratio	95% CI	p-value
Sexual violence (N = 71)			
Age			0.354
<18	Ref		
18–25	0.405	0.100–1.644	0.206
>25	1.035	0.310–3.458	0.955
Cognitive disability			
Yes	0.775	0.196–3.068	0.717
No	Ref		
Prior abuse			
Yes	0.721	0.230–2.267	0.576
No	Ref		
Perpetrator			0.014*
Known	0.599	0.149–2.406	0.470
Recent contact	0.132	0.030–0.573	0.007*
Stranger	Ref		
Alcohol/drugs use before assault			
Yes	0.540	0.173–1.685	0.289
No	Ref		

*p < 0.05.

legal consequences, it is important to document family violence properly in order to increase knowledge about the nature and extent of the problem.[31] Several ED physicians and nurses of the Centre are trained in forensic medicine, hereby increasing the standard of examination. It still worth exploring whether more involvement of forensic physicians, possibly also without interference of the police, could improve IPV victims' rights.

A second important finding is that psychosocial follow-up care was provided to many victims but that there were also victims that could not be reached or indicated they did not want help. Other assault centres also report difficulties in follow-up care, which might be explained by violence victims not being aware of the health consequences of violence; wanting to forget the violent incident; being ashamed or disorganized as a consequence of their mental state following the assault; having chaotic living conditions; or being unavailable because their phone numbers and addresses keep changing.[32–34] Another explanation might be that the Centre's follow-up care does not meet these victims' needs or that they are already receiving adequate care.

The third important finding is that reporting rates in the CSFV population were higher than those in a general population of sexual and family violence victims.[35,36] This can partly be explained by the police being the main referrer and the seriousness of the incidents, but the CSFV protocol, including information about reporting as one of its steps, may have contributed as well. Other assault centres show high reporting rates as well, indicating that assault centres might have a positive effect on reporting.[37,38]

Half the victims in our Centre, however, do not report. Reporting rates drop when the perpetrator is a recent contact. Most of these recent contacts are encounters in a party or club setting. It would appear that the ambiguous context of many of these assaults – with their nightlife setting, alcohol intake and fellow partygoers as perpetrators – may not answer to the victims' idea of assault, which is influenced by rape myths, traditional rape scripts and the commonness of rape amongst peers.[35,39,40] Victims may think, therefore, that they will not be believed, which decreases their willingness to report, and their willingness to report is decreased even further by use of alcohol.[9,35,41] In our study, the percentage of victims that had taken drugs or alcohol, voluntarily or involuntarily, was considerable, which corresponds with data from other assault centres. Perhaps most of them were victims of opportunistic DFSA rather than involuntary DFSA as the combination of alcohol and voluntary drug use appears to puts people at greater risk of sexual assault than covert drink-spiking.[41,42]

The police decided more often to discontinue the reporting procedure when the assault had been committed by a recent contact. Attrition, i.e. those cases that drop out of the criminal justice system at various points before or after charges have been filed, is a well-known problem in sexual assault, referred to as the 'justice gap'.[43] Many things may account for this justice gap, but it is clear that ambiguity of evidence does not have a positive influence on a victim's case.[43,44]

4.1. Implications for practice and research

The shared characteristics of victims of sexual and family violence and their common use of services might indicate that it would be beneficial to combine care in one assault centre. There is a considerable overlap in the information care providers need from both groups of victims in order to provide good care.[45] Combining care increases numbers, which accelerates expertise build-up and prevents knowledge and resources from being scattered, which is especially interesting for small settings with low resources.

Like other centres worldwide, the CSFV was mainly attended by young females. Perhaps assault centres do not reach particular groups of victims, such as victims of elder abuse, sexual partner violence and male victims, which have a higher prevalence in society than our study shows. Assault centres should be aware of these groups and reach out to them through adjusted protocols and public communication.

Follow-up care is one of the most important tasks of an assault centre, but not everyone can be reached. Follow-up care may have to be reorganized to include every victim, but, in certain cases, abstaining from giving care may do more justice to the victims' needs and autonomy. Police reporting faces a similar dilemma: it seems commonsensical to pursue increased reporting rates, but reporting might not always be the best coping strategy for victims.

Regardless of these dilemmas, there are some elements in assault centre services that we consider to be important in any case. In follow-up care services, it is essential to provide psychoeducation: discussing coping strategies, encouraging social support, explaining common psychological and physical reactions after assault and telling victims that they are not to be blamed.[46] Guidelines for follow-up care should provide room for tailored care, that is, care adapted to each victim's specific needs, taking their vulnerability, including revictimization and pre-existing mental health, into account.[12,47] To provide such tailored care, an assessment should ideally be made of the victims' goals, health and the extent of the violence and trauma they are dealing with. The victims' GPs should be actively involved as they are the only continuous healthcare providers who can monitor the victims' changing needs in the long term.[48,49]

With regard to reporting, interdisciplinary case reviews are helpful to examine whether an assault centre has created an optimal setting for reporting. Forms of interdisciplinary collaboration between law enforcement and psychosocial services have proven to be helpful in changing law enforcement's skills and attitudes towards victims in a positive way.[50,51]

The dilemmas facing follow-up care and reporting deserve more research. We need to gather in-depth information on the victims' demands and needs regarding specific follow-up care services after acute assault and improve our understanding of grounds for reporting or not reporting from the victims' perspective. The effect of reporting on the victims' recovery is currently a research gap that needs to be addressed as is the possible surplus value of forensic medical examination in IPV victims.

4.2. Strengths and limitations

By comparing sexual and family violence victims in this study, we have added valuable knowledge of assault centre populations. Assault centres are a new phenomenon in the Netherlands. We have seen that our population's age, gender, vulnerabilities and assault characteristics correspond with assault centre data worldwide.[20,52–54] These resemblances in our populations emphasize the need for sharing knowledge of good practices. While most studies distinguish only 'Known perpetrators' and 'Strangers', another strength of our study is that we took 'Recent contact' as a separate variable; 'Recent contacts' deserve special attention as this category strongly decreases reporting rates.

A limitation of this study is the fact that not all characteristics were consistently registered on the research registry forms by ED employees. Most characteristics, such as age and type of assault, are complete, but other important data, such as having an intellectual disability, previous abuse and alcohol use were not always registered and are, therefore, probably underestimated. As physical partner abuse is often accompanied by sexual partner abuse,[1,5] we assume that our combined abuse percentages are also underestimated. Data on background characteristics, furthermore, were limited, and we had no information on cultural background,

educational level or socio-economic status. Many findings were not statistically significant as the study had relatively small numbers involved. The small numbers in the family violence group did not allow us to conduct a multivariate logistic regression analysis for this group. Small numbers are common in this research field due to the sensitive nature of the subject.

The similarities between minor and adult sexual assault victims can partly be explained by the overlap between adolescents of 12–17 years old (n = 26) and adults of 18–25 years old (n = 21). Together, they make the largest group to attend the CSFV. Both age groups often experiment with relationships, sexuality, going out, alcohol and drugs which makes them prone to specific types of assault such as DFSA or assault by a recent contact. It is likely that the characteristics of children below the age of 12 differ from those of 12–17 years old. However, the number of 8 children attending the Centre was too small to make comparisons.

Finally, it is important to note that we studied a specific group of abuse victims, namely those who reached out for help at an assault centre. The family violence victims were mostly severely injured, needing immediate medical care. Nearly all sexual assault victims experienced vaginal or anal penetration, one in five was assaulted by more than one assailant and nearly one in five had an intellectual disability. This might indicate that the Centre is mainly attended by victims of severe violence and by victims who are vulnerable. Therefore, the characteristics of this study cannot be generalized to the large, unseen group of sexual and family violence victims in society.

5. Conclusion

Both minor and adult victims of sexual and family violence belong to vulnerable groups that are prone to revictimization. Combined care in one assault centre ensures that victims can make use of the same services and knowledge of gender-based violence. One of the major aims of assault centres is to prevent revictimization, which might be facilitated by adequate psychosocial follow-up care and reporting. The victims' needs in these matters deserve further research.

Conflict of interest statement

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