Characteristics of a national sample of victims of intimate partner violence (IPV): Associations between perpetrator substance use and physical IPV

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ABSTRACT
BACKGROUND – This paper provides a characterisation of a national sample of intimate partner violence (IPV) victim shelter residents. The study also examines whether perpetrator substance use contributed to physical IPV in 2 subsamples: 1) Norwegian victims and perpetrators, and 2) immigrant victims and perpetrators. METHODS – A national sample (N=1363) of women at IPV shelters in Norway in 2011. RESULTS – The majority (62.2%) of the women had immigrant background, and social security was the most common employment/income status (42.6%). A combination of psychological and physical IPV was most frequently reported (56.1%). Perpetrator substance use was common in the Norwegian sample (57.5%), while many in the immigrant sample (47.1%) were unsure about perpetrator substance use. Perpetrator substance use was associated with physical IPV in both subsamples. CONCLUSION – Immigrant IPV victims are overrepresented in the shelter population, as are women on social security. While substance use is associated with physical IPV among Norwegians and immigrants, the association is more obvious in the Norwegian sample. The high rates of immigrant women stating they are unsure about perpetrator substance use underscore the importance that future studies address this question in a culturally sensitive manner.

KEYWORDS – intimate partner violence, harms to others, substance use, cultural differences, Norway

Submitted 01.11.2014 Final version accepted 10.02.2014

Introduction
While intimate partner violence (IPV) is a health and social problem globally, prevalence differs greatly across cultures (Garcia-Moreno et al., 2013), from two out of three women in some countries to one in seven in others. In Norway it is estimated that about one in four women experience IPV at one point in their lives (Neroien & Schei, 2008). A link has been shown between substance use and IPV (Fals-Stewart, Golden, & Schumacher, 2003), but it has not been established whether the link is equally strong in IPV victims and perpetrators from different cultures.

Intimate partner violence refers to “physical, sexual or psychological harm caused by a current or former partner or spouse” (CDCP, 2013). The consequenc-

Acknowledgements
Thanks to Hilde Pape and Njål Andersen for constructive comments and feedback.
es of IPV can be severe and include both physical and psychological problems, such as injury, chronic pain, gastrointestinal and gynaecological problems, eating problems, depression, hypertension and post-traumatic stress disorder (Campbell, 2002).

IPV has been associated with societal factors such as poverty and inequality between the sexes (Jewkes, 2002). While many of the factors related to IPV are rare in the Norwegian setting, many women still experience IPV at some point in their lives (Nerøien & Schei, 2008), and some seek help at shelters for IPV victims. The shelters admit IPV victims in need of a safe refuge from perpetrator(s), and the women are offered practical help to deal with their situation, finding a lawyer, contacting public welfare services and dealing with trauma. The centres have staff who are experts in treating IPV victims.

Studies on the general population and shelter samples capture different forms of IPV (Johnson, 2006). Whereas surveys typically capture couple violence in the general population, where both men and women are perpetrators, shelter samples are more likely to capture intimate terrorism, which can be described as systematic violence by a male perpetrator to “maintain control over his woman” (Johnson, 1995). Women of immigrant background are overrepresented among those who seek help for IPV at shelters (SRN, 2012), the majority coming from African, Asian and South American countries (Jonassen, 2004). Although the IPV shelter population represents only a small fraction of IPV victims, a national sample of IPV shelter residents offers the opportunity to describe a country’s intimate terrorism victims.

Substance use contributes to both increased risk and severity of IPV (Brecklin, 2002; Desjardins & Hutton, 2004; Fals-Stewart et al., 2003; Foran & O’Leary, 2008; Kantor & Straus, 1987; Thompson & Kingree, 2006; Wolff, Busza, Bufumbo, & Whitworth, 2006). Men who engage in heavy drinking are more often violent towards their partners (Bye & Rossow, 2009; O’Leary & Schumacher, 2003). Infrequent but heavy drinking, typical in the Nordic countries (Bye & Rossow, 2009), contributes to the strong association between substance use and violence in the region (Rossow, 2001).

Research on cultural variation on the link between substance use and IPV is inconclusive. A study with data from 13 countries showed a consistent pattern across the countries that IPV was more severe in combination with substance use (Graham, Bernards, Wilsnack, & Gmel, 2011). This contradicts McDonald’s suggestion that the extent of the association between substance use and violence is learned in social settings, and that the link may not be the same for individuals from different cultural origins (McDonald, 1994).

While the broad patterns linking IPV with socioeconomic background and substance use are well researched, this research has generally been based on survey studies, which often differ from shelter samples. Knowledge of a link between substance use and IPV in a shelter sample and if there are differences based on cultural background will add to the literature and contribute information necessary for targeted prevention strategies.

To address these knowledge gaps, this paper will answer the following questions: What are the background characteristics of women staying at shelters because of IPV?
Does substance use contribute to physical IPV in two subgroups with Norwegian and immigrant victims and perpetrators? Using a national sample of female IPV victims at shelters in Norway in 2011, our specific aims were: 1) to describe socio-economic characteristics of a national sample of female IPV victims at shelters in total, and two subsamples of IPV victims and perpetrators of Norwegian and immigrant background, and 2) to examine if perpetrators’ substance use contributed to physical IPV.

Method and participants

Study sites
All 47 shelters in Norway provided information about female residents in 2011 (SRN, 2012).

Participants
There were 2552 residential stays at shelters in 2011. Of these, 103 cases did not give informed consent to have information about them registered. Our study sample consists of 2088 women with a total of 2449 residential stays in 2011. Only information about the women’s first shelter stays in 2011 are included in the study. The following cases were excluded: perpetrators other than previous or current intimate partners and cases with multiple perpetrators. After excluding cases that fell into one or more of the exclusion criteria, the sample consisted of 1363 women.

Procedures
A questionnaire with pre-coded response options was administered by the staff to women when they signed in for residential stay in a shelter.

Measures

Demographic variables
The following background variables were included: employment/income status was measured by the following variables: part- or full-time job, homemaker and social security. Pensions and social security constituted one employment category in the structured interview. The category “social security” therefore includes unemployment benefits and disability pensions as well. For the purpose of analysis, these variables were computed into one single variable. Only 7 women were over 60 years old in this sample, so we know that “pensions for retirement” does not apply to many women.

Age was reported in age groups. This variable was transformed into a semi-continuous variable to report mean age. The women also provided information about whether the IPV perpetrator was a spouse/ co-habiting partner, previous spouse/co-habiting partner or a boyfriend (not living together). Women also reported if they had children living with them at the shelter, and/or children living at home.

Residents were asked about their origin with the following question: “Was one or both of your parents born outside Norway?” The variable was dichotomised into immigrant (“yes both”) and Norwegian origin (“no”). A similar variable was created for the perpetrator’s origin.

For the purpose of investigating differences between Norwegian and immigrant subgroups, two groups were created: Norwegian victims with Norwegian perpetrators and immigrant victims with immigrant perpetrators. Cases where victim and perpetrator were of different background were excluded, as were cases lacking in-
formation on victim and/or perpetrator background.

**Substance use**
Information about perpetrator substance use during IPV abuse was reported in the variable “always or sometimes influenced by substances”, “always sober” and “don’t know”. The item which addressed perpetrator substance use did not differentiate between substances. Rather, it simply asked whether the perpetrator was influenced during the assault(s).

To investigate whether substance use contributed to physical IPV, a dichotomised variable was created. In this variable, cases where the victim was unsure about perpetrator substance use status were excluded in the Norwegian and immigrant subsamples. Further, cases without information on both perpetrator substance use and type of IPV were excluded from these analyses. Therefore, N is lower in Figure 1 and Table 2 than in Table 1.

**Type of IPV**
Different forms of IPV were measured in the variable “Type of IPV”. The response options – psychological abuse, threats and psychological injuries – were coded into “Psychological IPV”. Physical violence, rape, other sexual violence and physical injuries were coded into “Bodily harm”. If respondents reported both of these and/or confirmed they had suffered both psychological and physical injuries from the IPV, this was coded into “Both bodily harm and psychological IPV”. Physical and sexual IPV are grouped together as both can cause severe physical injuries. Further, there were few cases of sexual IPV, of which the majority also reported other physical violence. The questions regarding IPV were not limited to the last IPV episode.

Almost all respondents reported psychological violence, so to investigate the extent to which substance use contributed to an increase in certain forms of violence, the variable was dichotomised on the presence of bodily harm.

**Ethical considerations**
Individuals admitted to a shelter were asked to give informed consent for information about them to be registered. To ensure anonymity, names, personal identification numbers and addresses were not registered in the data files.

**Statistical analysis**
We present descriptive statistics for the entire sample and the two subsamples of Norwegian victims and perpetrators and immigrant victims and perpetrators. To investigate if subgroups differed on background characteristics, crosstabs with chi square and t-tests were used for categorical and continuous variables respectively. For the purpose of investigating if substance use (yes/no) contributed more to bodily harm in the Norwegian and immigrant group, crosstabs with chi square was performed. IBM SPSS 20.0 was used for statistical analysis.

**Results**
**Sample characteristics**
The mean age for the women was 35 years, the majority were of immigrant background (62.2%), were married to the perpetrator (82.3%), had children (88%), and social security was the most frequently reported employment/income status (42.6%). See Table 1 for details.
Table 1. Sample characteristics (%) of a national IPV shelter population in 2011

|                     | Whole sample | Norwegian victim and perpetrator | Immigrant victim and perpetrator |
|---------------------|--------------|----------------------------------|----------------------------------|
|                     | N = 1363     | n = 412                          | n = 548                          |
| Victim characteristics |              |                                  |                                  |
| Age (mean)***        | 35           | 39                               | 33                               |
| Victim’s parents born outside Norway | 62.5 | -                                | -                                |
| Employment/Income status*** | | Homemaker | 20.3 | 8.1 | 30.1 |
|                      | Part- or full-time job | 37.1 | 36.9 | 32.9 |
|                      | Social security | 42.6 | 55   | 37   |
| Parent(s) born outside Norway | 62.2 | -                                | -                                |
| Have children NS    | 88           | 85                               | 89.4                             |
| Victim’s relationship to perpetrator*** | | Spouse/partner with shared home | 82.3 | 74.5 | 87.1 |
|                      | Previous spouse/partner | 13.3 | 19.9 | 10.9 |
|                      | Boyfriend (not shared home) | 4.4 | 5.6 | 2   |
| Perpetrator characteristics | | Perpetrator’s parents born outside Norway | 48.9 | - | - |
| Perpetrator substance use during IPV assault*** | | Always/sometimes | 41.6 | 57.5 | 25.7 |
|                      | Never | 19.2 | 13.6 | 27.2 |
|                      | Don’t know | 39.2 | 28.9 | 47.1 |
| IPV characteristic   |              |                                  |                                  |
| Type of IPV***       |              |                                  |                                  |
| Psychological alone  | 28.2         | 31.1                             | 21                               |
| Bodily harm alone    | 4            | 2.7                              | 4.1                              |
| Bodily harm and psychological IPV | 67.8 | 66.2 | 74.9 |
| Length of stay (mean days) ** | | 26.5 | 22.5 | 29.3 |

** P<.01, ***P<.001, NS = Not significant

The majority of the perpetrators were of Norwegian background (51.1%), and 41.6% were always or sometimes influenced by substances during IPV assault. In 39.2% of the cases the women were not sure if the perpetrator had been under the influence of substance use during the assault(s). A combination of bodily harm and psychological abuse was the most frequently reported type of IPV (67.8%).

The subsamples differ on several variables. For example, the women in the Norwegian sample were 6 years older (p<.001) than the women in the immigrant sample. They also differed on employment/income status (p<.001): the proportion on social security was higher among the Norwegian women (55% vs. 37%), and more immigrant women were homemakers (30.1% vs. 8.1%). Perpetrator substance use in relation to the IPV episode(s) in the two subsamples differed significantly (p<.001). For example, 57.5% of Norwegian perpetrators as opposed to only 25.7% of immigrant perpetrators were always or sometimes influenced during IPV assault(s). The proportion that was uncertain about perpetrator substance use was higher in the immigrant sample (47.1% vs. 28.9%). The immigrant women
Figure 1. Association between perpetrator substance use and IPV severity (n) in the Norwegian (n=408) and immigrant (n=533) subsamples of IPV victims at shelters.

Norwegian

| Psychological | Bodily harm | Both bodily harm and psychological |
|---------------|-------------|----------------------------------|
| Substance use | Sober       | Unsure                           |

Immigrant

| Psychological | Bodily harm | Both bodily harm and psychological |
|---------------|-------------|----------------------------------|
| Substance use | Sober       | Unsure                           |

To illustrate the association between perpetrator substance use and types of IPV in the Norwegian and immigrant samples, two graphs (Figure 1) were created. The association between substance use and both bodily harm and psychological IPV was evident in the Norwegian sample; perpetrator substance use was present in 61.9% of the cases with both bodily harm and psychological IPV, against 11.9% of the cases without, and 26.3% of cases where women were uncertain regarding perpetrator substance use. In the immigrant sample, this association was less apparent; in 45.1% of the cases the victim is unsure about perpetrator substance use, whereas...
Table 2. Perpetrator substance use (yes/no) and differences in type of IPV reported in Norwegian (n=290) and Immigrant (n=282) IPV shelter residents

|               | Perpetrator substance use status (%) |       |       |
|---------------|-------------------------------------|-------|-------|
|               | Yes                                 | No    |       |
| Immigrant**   | Psychological violence alone         | 13    | 27.1  |
|               | Physical (often combined with psychological) violence | 87    | 72.9  |
| Norwegian**   | Psychological violence alone         | 24.8  | 42.9  |
|               | Physical (often combined with psychological) violence | 75.2  | 57.1  |

** P<.01

substance use is reported for 28.8%, and no substance use for 26.1%.

A large proportion (39.2%), particularly among the immigrant women (47.1%), said they were unsure about the perpetrator’s substance use. Next, cases where women were unsure about perpetrator substance use were excluded to investigate the association between perpetrator substance use (yes/no) and types of IPV.

Perpetrator substance use and bodily harm
Bodily harm was more prevalent in cases with perpetrator substance use in both the immigrant sample (87% vs. 72.9%, p<01) and the Norwegian sample (75.2% vs. 57.1%, p<.01) (Table 2).

Discussion
Norwegian and immigrant IPV victims at shelters differ on several variables such as employment, reports of perpetrator substance use and type of IPV. Further, perpetrator substance use is significantly associated with bodily harm in both subsamples.

The majority of the IPV victims at Norwegian shelters have immigrant background. According to Statistics Norway, only about 14% of the population are immigrants or children of immigrants (SSB, 2013a). This means that immigrant women are overrepresented at shelters, as are perpetrators with an immigrant background.

Immigrant victims stayed longer at the shelters than Norwegian victims. One possible explanation for this is that Norwegian victims have a larger support network and can get help from family and friends to a greater extent than immigrant women, who may have a smaller support network, depending on how long they have been in the country. A substantial proportion of immigrant women at Norwegian shelters have poor or no Norwegian language skills (SRN, 2012), suggesting either that they have not been in the country for long or that they are not well integrated.

The proportion of women on social security is high among the shelter residents. In comparison, in the general population in Norway less than 3% receive social security and about 3% are unemployed. Two thirds of women aged 15–74 in the general population are employed (SSB, 2013b, 2013c), while this applies to about only one in three in our sample. Considering that Statistics Norway includes girls/women who are still in school, that the general pension age is 67 years and that income from a job is higher than welfare, the IPV victims differ from the general population on income status. A higher propor-
tion of Norwegian than immigrant IPV victims were on social security. This is in contrast to the general population, where immigrants or individuals with immigrant parents account for about one in three who receive social support (SSB, 2013a, 2013c). Social security for perpetrators of shelter residents is also high, about 40% (Jonassen, 2004). This suggests that individuals with low socio-economic status are overrepresented among victims and perpetrators alike (Ellsberg, Pena, Herrera, Liljestrand, & Winkvist, 1999; Martin, Tsui, Maitra, & Marinshaw, 1999).

A combination of bodily harm and psychological IPV was most frequently reported among women in both subsamples. This is in line with what previous studies report: IPV victims who seek help at shelters have often experienced severe forms of IPV, whereas IPV victims who respond to survey studies often include “common couple violence” (Johnson, 1995). This refers to conflicts that escalate and sometimes get out of hand. (Johnson, 1995; Straus, Gelles, & Smith, 1990). A survey estimating the prevalence of partner violence in Norway showed that “mild violence”, such as threats or being prevented from moving was most common (Nerøien & Schei, 2008). These results contrast our findings and support the assertion that the type of IPV captured by survey and shelter samples are different (Johnson, 2006).

A substantial proportion of the IPV episode(s) occurred in conjunction with perpetrator substance use, more so in the Norwegian sample, whereas many immigrant women were unsure about perpetrator substance use. We don’t know why more immigrant than Norwegian women were unsure, but one possible explanation is that substance use is a sensitive topic in some cultures (Amodeo & Jones, 1997), causing women to be reluctant to answer due to stigmas associated to substance use. Another explanation may be language difficulties. A recent report showed that among immigrant victims at shelters, 19% did not speak any Norwegian, 39% had limited Norwegian language skills, 25% used an interpreter and another 8% should have used an interpreter (SRN, 2012). However, many spoke English, so while language difficulties may have contributed to some “don’t know” responses, it cannot be assumed that this explains the majority of these responses. With the uncertainty of what lies behind this response, we urge readers to be cautious in interpreting these findings. When excluding cases where perpetrator substance use was uncertain, there was an association between substance use and more severe IPV in both subgroups. The findings support the conclusions from a cross-national study that substance use “may serve to potentiate violence when it occurs, and this patterns holds across a diverse set of cultures” (Graham et al., 2011). The fact that many immigrant women in our sample claimed to be unsure about perpetrator substance use underscores the importance of cultural sensitivity when addressing topics that carry stigma in some cultures.

Limitations and strengths
The dataset does not provide information about which part of world the immigrant women were from. Previous reports have shown, however, that the immigrant women at Norwegian IPV shelters are mostly of Asian, African or South American origin (Jonassen, 2004). A substantial proportion
of the IPV victims said they were unsure regarding perpetrator substance use during the IPV assault(s), which reduced the sample size when investigating substance use and type of IPV. The question addressing perpetrator substance use did not differentiate between alcohol and drugs, so we do not know which substances the perpetrators were influenced by. Some substances are more strongly related to IPV than others. For example, alcohol and cocaine are more related to severe IPV than opioids and cannabis (Fals-Stewart et al., 2003). However, it should be taken into account that drug use often includes several substances such as using both opioids and cocaine (Gossop, 2001). Future studies on shelter samples should differentiate between different substances when asking about perpetrator substance use. A key strength of the study is that all shelters in Norway provided data about all IPV victims who agreed to be registered at admission to the shelter. The dataset is unique in that it represents a national sample of the IPV shelter population.

In conclusion, our data suggests that IPV victims with immigrant origin were overrepresented at the shelters, as were women with social security as reported income. IPV shelter residents most frequently report both bodily harm and psychological IPV. Although perpetrator substance use is associated with bodily harm in both subgroups, the association is more obvious in the Norwegian sample. The high prevalence of immigrant women who were unsure about perpetrator substance use stresses the importance that this question be addressed in a culturally sensitive matter.

Declaration of interest None.

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REFERENCES

Amodeo, M., & Jones, L. K. (1997). Viewing alcohol and other drug use cross culturally: A cultural framework for clinical practice. *Families in Society, 78*(3), 240–254.

Brecklin, L. R. (2002). The role of perpetrator alcohol use in the injury outcomes of intimate assaults. *Journal of Family Violence, 17*(3), 185–197.

Bye, E. K., & Rosso, I. (2009). The impact of drinking pattern on alcohol-related violence among adolescents: An international comparative analysis. *Drug and Alcohol Review, 29*(2), 131–137.

Campbell, J. C. (2002). Health consequences of intimate partner violence. *The Lancet, 359*(9314), 1331–1336.

CDCP. (2013). *Intimate Partner Violence: Definitions*. Retrieved from http://www.cdc.gov/violenceprevention/intimatepartnerviolence/definitions.html

Desjardins, N., & Hotton, T. (2004). *Trends in drug offences and the role of alcohol and drugs in crime* (Vol. 24). Toronto: Canadian Centre for Justice Statistics.

Ellsberg, M. C., Pena, R., Herrera, A., Liljestrand, J., & Winkvist, A. (1999). Wife abuse among women of childbearing age in Nicaragua. *American Journal of Public Health, 89*(2), 241–244.

Fals-Stewart, W., Golden, J., & Schumacher, J. A. (2003). Intimate partner violence and substance use: A longitudinal day-to-day examination. *Addictive Behaviors, 28*(9), 1555–1574.
Foran, H. M., & O’Leary, K. D. (2008). Alcohol and intimate partner violence: A meta-analytic review. *Clinical Psychology Review, 28*(7), 1222–34.

Garcia-Moreno, C., Pallitto, C., Devries, K., Stockl, H., Watts, C., & Abrahams, N. (2013). Global and regional estimates of violence against women: Prevalence and health effects of intimate partner violence and non-partner sexual violence. *Gossop, M.* (2001). A web of dependence. *Addiction, 96*(5), 677–678.

Graham, K., Bernards, S., Wilsnack, S. C., & Gmel, G. (2011). Alcohol may not cause partner violence but it seems to make it worse: A cross national comparison of the relationship between alcohol and severity of partner violence. *Journal of Interpersonal Violence, 26*(8), 1503–1523.

Jewkes, R. (2002). Intimate partner violence: Causes and prevention. *The Lancet, 359*(9315), 1423–1429.

Johnson, M. P. (1995). Patriarchal terrorism and common couple violence: Two forms of violence against women. *Journal of Marriage and the Family, 57*(2), 283–294.

Johnson, M. P. (2006). Conflict and control gender symmetry and asymmetry in domestic violence. *Violence Against Women, 12*(11), 1003–1018.

Jonassen, W. (2004). *Krisesentrene 2003. En kommentert statistikk* (Vol. Notat nr 1/2004). Oslo: Nasjonalt kunnskapscenter om vold og traumatisk stress.

Kantor, G. K., & Straus, M. A. (1987). The “drunken bum” theory of wife beating. *Social Problems, 34*(3), 213–230.

Martin, S. L., Tsui, A. O., Maïtra, K., & Marinshaw, R. (1999). Domestic violence in northern India. *American Journal of Epidemiology, 150*(4), 417–426.

McDonald, M. (1994). *Gender, drink and drugs* (Vol. 10). Oxford & Providence: Berg Publishers.

Nerøien, A. I., & Schei, B. (2008). Partner violence and health: Results from the first national study on violence against women in Norway. *Scandinavian Journal of Public Health, 36*(2), 161–168.

O’Leary, K. D., & Schumacher, J. A. (2003). The association between alcohol use and intimate partner violence: Linear effect, threshold effect, or both? *Addictive Behaviors, 28*(9), 1575–1585.

Rossow, I. (2001). Alcohol and homicide: A cross-cultural comparison of the relationship in 14 European countries. *Addiction, 96*(1s1), 77–92.

SRN (2012). *Rapportering fra krisesetertilbudene 2011* (Report from shelters for interpersonal violence victims). Trondheim: Sentio Research Norge (SRN).

SSB (2013a). *Innvandrere og norskfødte med innvandrerførelse, 1. januar 2013* (Immigrants and Norwegian-born to immigrant parents). Retrieved from http://www.ssb.no/befolkningsstatistikk/innvbeftaar/2013-04-25#content

SSB (2013b). *Labour force survey*. Retrieved from https://www.ssb.no/en/arbeid-og-lonn/statistikker/aku

SSB (2013c). *Økonomisk sosialhjelp, 2012* (Social assistance). Retrieved from http://www.ssb.no/soshjelpk/

Straus, M. A., Gelles, R. J., & Smith, C. (1990). *Physical violence in American families: Risk factors and adaptations to violence in 8,145 families*. Transaction Publishers, New Brunswick, NJ.

Thompson, M. P., & Kingree, J. (2006). The roles of victim and perpetrator alcohol use in intimate partner violence outcomes. *Journal of Interpersonal Violence, 21*(2), 163–177.

Wolff, B., Busza, J., Bufumbo, L., & Whitworth, J. (2006). Women who fall by the roadside: Gender, sexual risk and alcohol in rural Uganda. *Addiction, 101*(9), 1277–1284.