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Psychometric properties of the WHO Violence Against Women instrument in a male population-based sample in Sweden

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ABSTRACT

Objectives: To explore the psychometric properties of the World Health Organization's Violence Against Women instrument (VAWI) in a randomly selected national sample of Swedish men. Design: Cross-sectional survey study. Setting: Sweden. Participants: A postal survey was sent to 1009 men between January and March 2009, during which 458 men (45.4%) returned the questionnaire. Fifty-nine men who did not answer any of the violence items were excluded from the analyses, resulting in a final sample of 399 men. Primary and **secondary outcome measures:** Self-reported exposure to psychological, physical and sexual intimate partner violence. Results: Cronbach's alphas were 0.74 (psychological scale), 0.86 (physical scale), 0.82 (sexual scale) and 0.88 (total scale). Principal components analysis did not corroborate the conceptual three-dimensional model of the VAWI and other constructs were found. Past-year prevalence of physical (7.6%; 95% CI 5.0 – 10.2) and sexual (2.3%; 95% CI 0.8 – 3.8) violence was higher than in other Nordic studies; earlier-in-life prevalence of physical violence (6.8%; CI 95% 4.3 – 9.3) was lower and sexual violence (2.5%; 95% CI 1.0 - 4.0) was higher. Reported exposure rates were generally higher than those obtained from a concurrently administered instrument (NorVold Abuse Questionnaire). Conclusion: The VAWI conceptual model was only partially replicated and boundaries between psychological, physical and sexual acts of violence were indistinct among men exposed to intimate partnership violence. This finding suggests that there is need for research instruments assessing intimate partner violence to be validated separately in male and female samples in order to ensure their suitability for the respective groups. Furthermore, theoretical frameworks for understanding men's exposure to intimate partner violence need to be advanced and should serve to guide in the development and evaluation of gender-specific IPV assessment instruments.

ARTICLE SUMMARY

Article focus

- Differences in self-reported exposure to intimate partner violence among women and men have often been found regarding motives for using violence, the context in which the violence occurs and its consequences.
- However, psychometric properties of instruments assessing intimate partner violence among women and men are seldom investigated in male populations.
- The aim of this study was therefore to examine aspects of the validity and reliability of the VAWI in a randomly selected national population of men

Key messages

- The construct validity of the VAWI was not supported in the current study, which calls attention to the importance of investigating validity and reliability of instruments assessing intimate partner violence separately for women and men.
- Research instruments assessing intimate partner violence need to be validated separately in male and female samples in order to ensure their suitability for the respective groups.
- Frameworks/Theoretical models? for understanding men's experiences of violence in heterosexual relationships need to be advanced and should serve to guide in the development and evaluation of gender-specific IPV assessment instruments.

Strengths and limitations

- Cross-sectional study design among a male population.
- Further aspects of validity and reliability need to be explored.

INTRODUCTION

Most prevalence surveys on intimate partner violence (IPV) have focused on violence perpetrated against women by men. However, a burgeoning literature in mainly high-income countries has begun to assess IPV victimization also among men.[1-5] While such studies often use instruments that have primarily been developed for IPV perpetrated against women, few studies have evaluated their psychometric properties in male populations.

Although research findings on prevalence are inconclusive, they generally find that women and men report similar levels of violence when the contexts, motives, and consequences are not considered.[6] When they are considered, studies assessing IPV perpetrated by men compared to women often report gender differences regarding the types of violence, reasons for the violence, context in which the violence occurs and consequences of the violence.[6, 7] For example, studies assessing differences in IPV find men's violence against women to be more severe, threatening and controlling[8-10] and involve longer lasting victimization, fear of bodily injury or death, more injuries and more adverse health effects.[5, 11, 12] It has also been found that women tend to use physical violence out of anger, not being able to get the partner's attention or in self-defense and retaliation,[11] whereas men often use it as a means to exercise coercive control.[13, 14]

Given that studies find women's and men's IPV exposure to differ in certain aspects, it seems important to investigate whether the instruments that have been developed to assess IPV against women by men in heterosexual relationships are as suitable for assessing women's use of violence against men. It has been proposed that if violence etiologies differ for women compared to men, it may be that research instruments need to be adjusted as well.[15]

Most studies evaluating the psychometric properties of violence assessment instruments for use in men have focused on instruments assessing men's perpetration,[16] recidivism[17] or attitudes to violence.[18] Focusing specifically on instruments assessing exposure to violence, studies have been conducted with regards to screening IPV in emergency department settings,[19, 20] assessing childhood experiences of abuse or neglect[21, 22] or violence by several perpetrators.[23, 24] Additionally, many of these instruments were validated in specific populations, such as patients in emergency clinics,[19] psychiatric clinics,[22] alcohol treatment programs[24] or health care settings,[23] or they combined women and men in the same sample instead of conducting these analyses separately.[22, 25] There is a scarcity of instruments assessing specifically IPV exposure and that have been validated for use in male general population studies.

The World Health Organization (WHO) developed a questionnaire to assess violence victimization in population-based samples in the Multi-Country Study on Women's Health and Domestic Violence Against Women.[26] Included in this questionnaire is the Violence Against Women instrument (henceforth "VAWI") assessing psychological, physical and sexual IPV. Although the VAWI was developed to assess violence primarily against women, WHO originally also planned to use it in a sub-population of men to assess their experiences of IPV exposure. To date, the VAWI has been used in one male population of the ten countries in the Multi-Country Study, i.e. in Samoa.[26] More recently, a study conducted in Brazil assessed sexual IPV using the VAWI among men.[27]

To our knowledge, the psychometric properties of the VAWI have not previously been evaluated in a male population. The aim of this study was therefore to examine aspects of the

validity and reliability of the VAWI in a randomly selected national population of men aged 18-65 residing in Sweden.

METHODS

Data collection procedures, questionnaires and statistical analyses were the same as those used in the companion paper and are described in greater detail there. A brief description of the statistical analyses specific to the male sample is presented below.

Procedure, study population and response rate

Statistics Sweden randomly selected 1009 men, aged 18-65 years and residing in Sweden, from the national population register. Data collection took place between January and March 2009, during which 45.4% (n=458) returned the questionnaire. However, those who did not answer any of the violence items (n=59) were excluded from the analyses, resulting in a final sample of 399 men.

A second data collection was performed to examine the criterion validity of the VAWI against the NorVold Abuse Questionnaire (NorAQ).[23, 28] Statistics Sweden sent out the VAWI and NorAQ between November 2009 and January 2010 to 20% (n=92) of the respondents from the initial data collection. The response rate was 69.6% (n=64) for the VAWI and 59.8% (n=54) for NorAQ.

Drop-out analysis

Differences between non-responders and respondents regarding age, country of birth, civil status and the respondents' yearly income before tax were tested with the two-proportion z-test with Bonferroni adjustment.

Comparing those who did not return the questionnaire (n=551) with the final sample of analysis (n=399) revealed that non-respondents were 18-29 years old, unmarried, foreign born and had low yearly income of 0 – 159,999 Swedish Kronor (SEK) before tax. Internal dropout rates, that is, respondents who did not endorse any violence item (n=59), differed in a similar pattern from the final sample of analysis: they were 18-29 years old, unmarried and had a low yearly income in comparison to the final sample of analysis.

In the second data collection (n=92), response rates were lowest among men who were unmarried, divorced or widowed.

Assessment instruments: VAWI and NorAQ

The VAWI consists of behavior-specific items related to psychological (four items), physical (six items) and sexual IPV (three items). The physical violence items are further divided into "moderate" (the two first items) and "severe" (the following four items) violence based on the likelihood of physical injury.[26] NorAQ was developed to measure abuse in the health care system as well as emotional (three items), physical (three items) and sexual (four items) abuse by different perpetrators (see Appendix 1). NorAQ has been shown to have good validity and reliability in a Swedish context.[23, 28]

Statistical analyses

Principal components analysis (PCA) with a promax rotation was conducted to explore the internal construct validity of the violence items. Two component solutions were examined: 1) component extraction based on a parallel analysis, proportion of variance explained, Kaiser's

eigenvalue-greater-than-one rule and on the examination of Cattell's scree plot and; 2) a three-component solution as originally conceptualized in the VAWI.

The internal reliability of the VAWI was assessed with the Cronbach's alpha for each subscale (psychological, physical and sexual violence) and for the total violence scale.

Prevalence of psychological, physical and sexual violence was calculated for the past year and for earlier in life, for comparisons with prevalence rates presented in other studies.

Furthermore, life-time prevalence of IPV was compared between the VAWI and the NorAQ. Only those respondents who had answered both the VAWI and NorAQ were included (*n*=50) in this analysis. Fisher's exact test (95% CI level) was used to test for differences in prevalence found between the two instruments.

Ethical Considerations

The Regional Ethics Review Board located in Gothenburg gave approval for this study (Dnr: 527-08) and the WHO ethical and safety recommendations for research on domestic violence against women were followed.[29]

RESULTS

Study population

Nearly half of the men had completed high-school (n=173; 43.7%) and the mean age was 45 years (SD=13). Of the total sample, 87.9% (n=349) were currently in a relationship (i.e. boyfriend or girlfriend, married, registered partnership or cohabiting), of which the majority

were heterosexual (n=394; 98.7%). The rest of the sample was single, widowed or divorced.

These and other socio-demographic characteristics of the sample are described in Table 1.

Table 1. Socio-demographic and psychosocial factors of the total sample. N=399

jaciors of the total sample. N=399	
	$N\left(\%\right)$
Age groups	57 (1.4.0)
18-29	57 (14.3)
30-39	77 (19.3)
40-49	96 (24.1)
50-59	98 (24.6)
60-65	<i>71</i> (17.8)
Partner status	
Single/widowed/divorced	48 (12.1)
Boyfriend/girlfriend	53 (13.4)
Married/cohabitant/registered	296 (74.6)
partnership	(* (*)
Heterosexual relationship	394 (98.7)
Same-sex relationship	5 (1.3)
Sum sem resuments	0 (1.0)
Educational level (highest)	
University	156 (39.4)
High school (10-12 yrs)	173 (43.7)
Compulsory (≤9 yrs)	67 (16.9)
Annual income (before tax, SEK)	
0 - 159,999	77 (19.3)
160,000 - 234,999	52 (13.0)
235,000 - 309,999	107 (26.8)
310,000 or more	163 (40.9)
Elarge and shades	
Employment status	220 (92.2)
Employed	329 (83.3)
Student	20 (5.1)
Retired	23 (5.8)
Sick leave (more than 3 months)	5 (1.3)
Parental leave or leave of absence	2 (0.5)
Unemployed	11 (2.8)
Other	5 (1.3)
Country of Birth	
Sweden	356 (89.2)
Other Nordic country	7(1.8)
Other European country	10(2.5)
Country outside Europe	26 (6.5)
1	` /

Internal validity

The Kaiser-Meyer-Olkin measure of sampling adequacy was 0.89 and Bartlett's test of Sphericity was significant (p < 0.05), verifying a good fit of the data to the PCA. The parallel analysis and Kaiser's criterion suggested two components; however, the third component had an eigenvalue equal to one after decimal rounding and Cattell's scree test suggested three components.

The two component solution (not in Table) explained 68.6% of the total variance: the first component contained the item assessing threat of physical violence ("Threatened to hurt me or someone I care about"), the last three physical violence items and all sexual violence items. This component predominantly included items describing acts that presumably would lead to physical injury. The second component consisted of the three first psychological and the three first physical violence items.

A three-component solution (Table 2) explained 76.0% of the total variance. The first component (C1), explaining 55.4% of the variance, consisted of all the VAWI's sexual violence items as well as the three (out of four) physical violence items conceptualized to reflect severe forms of violence likely to produce physical injury.[11] This component was labeled "Injury inducing violence". The second component (C2) was called "Intimidation and moderate violence" and consisted of the remaining three physical violence items mainly reflecting milder forms of violence and the last two psychological violence items ("Tried to scare and intimidate me on purpose" and "Threatened to hurt me or someone I care about"). The last component (C3) was named "Humiliation" and comprised the two first psychological violence items "Insulted me in a way that made me feel bad about myself" and "Belittled and humiliated me in front of other people". The question assessing threat of psychological

violence loaded on both the first (0.51) and the second (0.49) components. All other items loaded higher on their main components than on other components and main component loadings were all above 0.60.

Table 2. The two- and three-component solutions for the VAWI psychological, physical and sexual violence items. N=386

	Three-component				
	solution				
Conceptual model	C1	C2	C3		
Psychological Violence					
1		.32	.73 ^a		
2			.87		
3		.80			
4	.49	.51			
Physical Violence					
1		.77			
2		.61			
3		.85			
4	.85				
5	.91				
6	.83				
Sexual Violence					
1	.69		.43		
2	.97				
3	.94				
Accumulated variance %	55.4	68.6	76.0		
Eigenvalues	7.2	1.7	1.0		

^a Loadings > 0.30 are shown and highest loadings are boldfaced. List-wise deletion was used.

Internal reliability

Cronbach's alpha coefficients (Table 3) showed satisfactory internal reliability for all conceptualized VAWI scales: 0.74 for psychological violence, 0.86 for physical violence and 0.82 for sexual violence. Alpha for the sexual violence scale would augment from 0.82 to 0.92 by deletion of the first item ("Demanded to have sex with me even though I did not want to (but did not use physical force)"). Cronbach's alpha for the total scale was 0.88.

Table 3. Cronbach's α of the VAWI psychological, physical and sexual violence scales and total scale, life-time. N=399

	Alpha if
Scales	Item
	Deleted
Psychological violence	
1 Insulted me in a way that made me feel bad about myself	.66
2 Belittled and humiliated me in front of other people	.64
3 Tried to scare and intimidate me on purpose (e.g. by the way he/she	.64
looked at you, by yelling or smashing things)	
4 Threatened to hurt me or someone I care about	.64
Total	.74
Physical violence	
1 Pushed or shoved me	.87
2 Thrown something at me that could have hurt me	.82
3 Hit me with his/her fist or with some other object that could have hurt me	.81
4 Kicked and dragged me and beat me up	.82
5 Choked me or burnt me on purpose	.83
6 Hurt me with a knife, a gun or some other weapon	.85
Total	.86
Sexual violence	
1 Demanded to have sex with me even though I did not want to (but did not use physical force)	.92
2 Forced me to have sex against my will by using his/her physical strength (by hitting, holding me firmly or threatening me with a weapon)	.71
3 Forced me to perform sexual acts that I experienced as degrading and/or humiliating	.68
Total	.82
Violence scale, total	.88

External validity

Comparison of prevalence rates to other studies

As assessed with the VAWI, 24.0% (n=92) of the respondents reported exposure to psychological violence, 7.6% (n=29) to physical violence and 2.3% (n=9) to sexual violence during the past twelve months. Earlier-in-life exposure was 13.8% (n=55) for psychological, 6.8% (n=27) for physical and 2.5% (n=10) for sexual violence (Table 4).

Table 4. *Past-year and earlier-in-life exposure to IPV as assessed with the VAWI*. N=399

_	Past year		Earlier in life			
	N	% a	CI %	N	% a	CI %
Psychological violence	92	24.0 a	$19.8 - 28.2^{\mathbf{b}}$	55	13.8	10.4 - 17.2
Physical violence	29	7.6	5.0 – 10.2	27	6.8	4.3 – 9.3
Sexual violence	9	2.3	0.8 - 3.8	10	2.5	1.0 - 4.0

^a Percentage is given in valid percent.

VAWI and NorAQ

A comparison between VAWI and NorAQ was conducted to assess criterion validity (*N*=50; see Table 5). NorAQ was chosen as it is the only questionnaire measuring violence that has been validated in Sweden in both a male and female (see companion article) population-based sample. The VAWI yielded higher prevalence rates than the NorAQ in relation to all three violence scales. However, only the difference in psychological IPV was statistically significant (30.6% vs. 10.2%; p<0.05). This difference owed principally to the VAWI items "Insulted me in a way that made me feel bad about myself" (24%) and "Belittled and humiliated me in front of other people" (16%). Prevalence rates for the other items on this scale were similar to corresponding items in the NorAQ (see Appendix 1).

Table 5. Life-time prevalence of exposure to IPV as assessed with the VAWI versus NorAQ. N=50

	$\mathbf{V}\mathbf{A}\mathbf{W}$		NorAQ	
	N	% a	N	% а
Psychological violence	15	30.6	5	10.2
Physical violence	7	14.3	6	12.5
Sexual violence	4	8.2	3	6.1

^a Percentage is given in valid percent.

DISCUSSION

The VAWI conceptual model was only partially replicated and boundaries between psychological, physical and sexual acts of violence were indistinct. This finding underlines

^b The confidence interval was set at 95%.

the importance of investigating psychometric properties of instruments assessing IPV separately for male and female populations. Although the dimensionality of the VAWI was not supported, items composing the three sub-scales, i.e. psychological, physical and sexual violence, showed good internal consistency. Higher prevalence rates for past-year physical and sexual violence were found than those reported in the literature, and than those yielded by a concurrently administered violence questionnaire (NorAQ).

Internal validity

Extraction criteria suggested both a two- and a three-component solution; however, a three-component solution was chosen for comparison with the VAWI conceptual model. In general, the VAWI model was not replicated by PCA in the three-component model and other constructs were found which reflected more the severity rather than the types (psychological, physical and sexual) of violence. Although the three-component structure obtained in the female sample (companion article) also reflected the severity of the acts of violence to a certain extent, the PCA structure in that sample conformed better to the VAWI conceptual model of psychological, physical and sexual violence. Another study that conducted exploratory factor analysis on a different instrument assessing psychological and physical IPV among high school students, also found that the boundaries of psychological and physical IPV were indistinct for men whereas they were generally distinct for women.[30]

Our finding that the underlying constructs differ for women versus men needs to be investigated further. Several researchers have hypothesized that men's experiences of partner violence are qualitatively different from those of women,[12, 31] although few qualitative studies exist that would have investigated this in depth. Previous research has argued that violent acts are not as fearsome or injury inducing to men as they are to women, and it is

indeed possible that men and women are both exposed to and experience IPV in different, gendered ways.[31] This could indicate that different conceptual models, and possibly different assessment instruments, are needed in order to accurately assess men's experiences of IPV in heterosexual relationships.[19] However, further studies, especially qualitative ones, are needed in order to explore this further.

Internal reliability

All three subscales showed acceptable internal reliability. Alpha of the sexual violence scale would augment from .82 to .92 by deletion of the first item ("Demanded to have sex with me even though I did not want to (but did not use physical force)"). However, given that the current study is explorative and hypothesis generating, further studies are needed to assess whether the scale would need to be revised or not.

External validity

Comparison of prevalence rates to other studies

Comparisons of our prevalence rates with those from previous studies are hampered by the fact that there exist few Nordic, population-based studies focusing on men's self-reported exposure to IPV. A recent population-based study conducted in Finland (n=1,119), which used similar definitions to the VAWI found lower prevalence for physical (4.4% versus 7.6%) and sexual (0.3% versus 2.3%) IPV experienced during the past year.[9] For earlier in life (n=1,423), the same study found a higher prevalence for physical IPV (19.5% versus 6.8%) than the current study, but a lower prevalence for sexual IPV (1.6% versus 2.5%). The study did not measure psychological violence.

Although it was expected that IPV reported for the past year would be less than for earlier in life, similar levels of physical and sexual violence were reported for both periods in the current study. Furthermore, psychological violence was also reported to a considerably lesser extent for earlier in life than for the past year. These results are likely due to a pattern observed in other studies where men report significantly lower prevalence for IPV experienced earlier in life when compared to women.[1, 5, 10] One possibility is that if men experience less severe and threatening violence, it may not be salient enough for them to recall later in life. However, the results may also be due to an oversight in the questionnaire layout, where the box for ticking violence experienced earlier in life was somewhat unclearly placed.

VAWI and NorAQ

The items comprising the VAWI seem to capture a broader spectrum of violent acts, especially psychological violence, than the more systematic types of abuse reflected in the NorAQ. Given the small sample used in this analysis, we cannot draw any conclusions as to which questionnaire is more useful for assessing IPV; however, since they tap a different range of such experiences, the choice of instrument should be made in accordance with the researcher's aim.

Methodological considerations

The overall non-response rate was high (54.6%) and response rates were lower among young men, unmarried men, men with a lower annual income and men born outside Sweden, which compromises the generalizability of our results. Little is known about men's response patterns in surveys on violence exposure perpetrated by their intimate partners. A recent review of gender differences in self-reported IPV cites some studies in which men underreport their

experiences of IPV,[6] whereas another review found studies pointing to the contrary.[7] Future research investigating men's patterns and reasons for responding or not responding to a postal survey on IPV, especially in a Nordic context, would shed more light on these matters.

Studies on validity assess the extent to which an instrument measures what it is intended to measure.[32] Future research should consider concerns raised by researchers as to the validity of instruments assessing IPV among men in view of the lack of a common definition for what constitutes male victimization of partner violence in intimate heterosexual relationships.[19] Although there exist official and widely used definitions of violence against women by their intimate partners, such as the United Nation's definition of violence against women,[33] there is little consensus about what constitutes violence against men in an intimate relationship.[31, 34] Even when the same act of violence is assessed, the experiences of these acts can be different due to various cultural definitions of femininity and masculinity and to how they are informed by gender hierarchy and power.[7] Definitions need to be clarified so that they adequately capture men's experiences of being abused in an intimate relationship.[34]

CONCLUSION

The VAWI conceptual model was only partially replicated and boundaries between psychological, physical and sexual acts of violence were indistinct among men exposed to IPV. This finding suggests that research instruments assessing intimate partner violence need to be validated separately in male and female samples in order to ensure their suitability for the respective groups. However, more and larger studies with better response rates are needed in order to verify the results. Furthermore, theoretical frameworks for understanding men's exposure to intimate partner violence need to be advanced and should serve to guide in the development and evaluation of gender-specific IPV assessment instruments.

COMPETING INTERESTS

The authors declare that they have no competing interests.

CONTRIBUTORSHIP STATEMENT

LN conducted all analyses, wrote the first draft of the manuscript and rewrote new drafts based on input from co-authors. CT planned the analyses amd gave input on manuscript drafts. GK designed the project, planned the analyses and gave input on manuscript drafts. All authors read and approved the final manuscript.

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DATA SHARING STATEMENT

Appendix 1. The NorAQ violence items.

Psychological Violence

Has your partner systematically and for a longer period tried to repress, degrade or humiliate you?

Have you experienced living in fear because your partner systematically and for a longer period threatened you or somebody close to you?

Has your partner systematically and under threat or force tried to limit your contacts with others, or totally control what you may and may not do?

Physical Violence

Has your partner hit you, smacked your face or held you firmly against your will? Has your partner hit you with his/her fist(s) or with a hard object, kicked you, pushed you violently, given you a beating, trashed you or done anything similar to you?

Has your partner threatened your life by, for instance, trying to strangle you, showing a weapon or knife or by any other similar act?

Sexual Violence

Has your partner <u>against your will</u> touched your genitals, used your body to satisfy him/herself sexually or forced you to touch your partner's genitals? Has your partner <u>against your will</u> forced intercourse on you?

Has your partner <u>against your will</u> touched parts of your body other than the genitals in a 'sexual way' or forced you to touch other parts of his or her body in a 'sexual way'?

Have you any other way been sexually humiliated; e.g. by being forced to watch a porno movie or similar, forced to participate in a porno movie or similar, forced to show your body naked or forced to watch when your partner showed his/her body naked?

References

- 1. Heiskanen M, Ruuskanen E: **Men's Experiences of Violence in Finland 2009**. *No: ISBN 978-952-5333-85-5* 2011:109.
- 2. Straus MA: Dominance and symmetry in partner violence by male and female university students in 32 nations. Children and Youth Services Review 2008, 30(3):252-275.
- 3. Romans S, Forte T, Cohen MM, Du Mont J, Hyman I: **Who Is Most at Risk for Intimate Partner Violence?** *Journal of Interpersonal Violence* 2007, **22**(12):1495.
- 4. Archer J: Sex differences in physically aggressive acts between heterosexual partners: A meta-analytic review. *Aggression and Violent Behavior* 2002, **7**(4):313-351.
- 5. Tjaden P, Thoennes N: **Prevalence and consequences of male-to-female and female-to-male intimate partner violence as measured by the National Violence Against Women Survey**. *Violence Against Women* 2000, **6**(2):142.
- 6. Chan KL: Gender differences in self-reports of intimate partner violence: A review. Aggression and Violent Behavior 2011, 16(2):167–175.
- 7. Kimmel MS: Gender Symmetry in Domestic Violence: A Substantive and Methodological Research Review; 2005.
- 8. Tanha M, Beck CJA, Figueredo AJ, Raghavan C: Sex differences in intimate partner violence and the use of coercive control as a motivational factor for intimate partner violence. *Journal of Interpersonal Violence* 2010, **25**(10):1836.
- 9. Selin KH: Våld mot kvinnor och män i nära relationer. Våldets karaktär och offrens erfarenheter av kontakter med rättsväsendet. (Violence against women and men in intimate relationships. The nature of the violence and the victims' experiencse of contacts with the criminal justice.). *Volume 12*. Stockholm; 2009.
- 10. Haaland T, Sten-Erik Clausen & Berit Schei (red): Vold i parforhold ulike perspektiver. Resultater fra den første landsdekkende undersøkelsen i Norge. (Couple Violence different perspectives. Results from the first national survey in Norway) NIBR-rapport 2005:3. Oslo: Nordberg A.S.; 2005.
- 11. Bair-Merritt MH, Shea Crowne S, Thompson DA, Sibinga E, Trent M, Campbell J: Why Do Women Use Intimate Partner Violence? A Systematic Review of Women's Motivations. *Trauma, Violence, & Abuse* 2010, **11**(4):178.
- 12. Dobash RP, Dobash RE: **Women's violence to men in intimate relationships**. *British Journal of Criminology* 2004, **44**(3):324.
- 13. Johnson MP: Conflict and control: Gender symmetry and asymmetry in domestic violence. *Violence Against Woman* 2006, **12**(11):1003-1018.
- 14. Swan SC, Gambone LJ, Caldwell JE, Sullivan TP, Snow DL: A review of research on women's use of violence with male intimate partners. *Violence and Victims* 2008, **23**(3):301.
- 15. Rabin RF, Jennings JM, Campbell JC, Bair-Merritt MH: **Intimate partner violence screening tools: a systematic review**. *Am J Prev Med* 2009, **36**(5):439-445 e434.

- 16. Loinaz I, Echeburúa E, Ortiz-Tallo M, Amor PJ: **Psychometric properties of the Conflict Tactics Scales (CTS-2) in a Spanish sample of partner-violent men**. *Psicothema* 2012, **24**(1):142.
- 17. Wakeling HC, Howard P, Barnett G: Comparing the validity of the RM2000 scales and OGRS3 for predicting recidivism by internet sexual offenders. Sexual Abuse: A Journal of Research and Treatment 2011, 23(1):146-168.
- 18. Yun SH, Vonk ME: **Development and Initial Validation of the Intimate Violence Responsibility Scale (IVRS)**. Research on Social Work Practice 2011, **21**(5):562-571.
- 19. Mills TJ, Avegno JL, Haydel MJ: Male Victims of partner violence: Prevalence and accuracy of screening tools. *Journal of Emergency Medicine* 2006, **31**(4):447-452.
- 20. Shakil A, Donald S, Sinacore JM, Krepcho M: Validation of the HITS domestic violence screening tool with males. *Fam Med* 2005, **37**(3):193-198.
- 21. Thombs BD, Bernstein DP, Lobbestael J, Arntz A: A Validation Study of the Dutch Childhood Trauma Questionnaire-Short Form: Factor Structure, Reliability, and Known-Groups Validity. Child Abuse & Neglect: The International Journal 2009, 33(8):6.
- 22. Kooiman C, Ouwehand A, Ter Kuile M: **The Sexual and Physical Abuse Questionnaire (SPAQ):: A screening instrument for adults to assess past and current experiences of abuse**. *Child abuse & neglect* 2002, **26**(9):939-953.
- 23. Swahnberg K: NorVold Abuse Questionnaire for Men (m-NorAQ): Validation of New Measures of Emotional, Physical, and Sexual Abuse and Abuse in Health Care in Male Patients. *Gender Medicine* 2011, 8(2):69-79.
- 24. Langeland W, Draijer N, van den Brink W: **Assessment of lifetime physical and sexual abuse in treated alcoholics:: Validity of the Addiction Severity Index**. *Addictive behaviors* 2003, **28**(5):871-881.
- 25. Kapur NA, Windish DM: Optimal Methods to Screen Men and Women for Intimate Partner Violence: Results From an Internal Medicine Residency Continuity Clinic. *Journal of Interpersonal Violence* 2011, **26**(12):2335-2352.
- 26. WHO: Multi-Country Study on Women's Health and Domestic Violence against Women. Initial results on prevalence, health outcomes and women's responses. Edited by WHO/WHD. Geneva; 2005.
- 27. Schraiber LB, D'Oliveira AFPL, França Junior I: **Intimate partner sexual violence among men and women in urban Brazil, 2005**. *Revista de Saúde Pública* 2008, **42**:127-137.
- 28. Swahnberg K, Hearn J, Wijma B: **Prevalence of perceived experiences of emotional, physical, sexual, and health care abuse in a Swedish male patient sample**. *Violence and Victims* 2009, **24**(2):265-279.
- 29. Watts C, Heise L, Ellsberg M, Moreno G: Putting women first: ethical and safety recommendations for research on domestic violence against women. *Geneva: World Health Organization* 2001.
- 30. Cascardi M, Avery-Leaf S, O'Leary KD, Slep AMS: Factor structure and convergent validity of the Conflict Tactics Scale in high school students. *Psychological Assessment* 1999, **11**(4):546.
- 31. Stark E: **Do violent acts equal abuse? Resolving the gender parity/asymmetry dilemma**. *Sex roles* 2010, **62**(3):201-211.
- 32. Streiner DL, Norman GR: *Health measurement scales: a practical guide to their development and use. Chapter 10: Validity*: Oxford University Press, USA; 2008.

- 33. Assembly UNG: Declaration on the elimination of violence against women. A/RES/48/104. 1993.
- 34. Randle AA, Graham CA: **A review of the evidence on the effects of intimate partner violence on men**. *Psychology of Men & Masculinity* 2011, **12**(2):97.