

THE ROLE OF ATTITUDES TO, AND THE FREQUENCY OF, DOMESTIC VIOLENCE ENCOUNTERS IN THE HEALTHCARE PROFESSIONALS' HANDLING OF DOMESTIC VIOLENCE CASES

VLOGA STALIŠČ IN POGOSTOSTI SREČEVANJA Z NASILJEM V DRUŽINI PRI UKREPANJU ZDRAVSTVENEGA OSEBJA

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ABSTRACT

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Background. Domestic violence is recognized as a public health problem with a high prevalence in the general population. Healthcare professionals play an important role in the recognition and treatment of domestic violence. Hence, conducting research on factors that facilitate or inhibit appropriate actions by healthcare professionals is of the utmost importance. The objective of the study was to examine the relationship between healthcare professionals' attitudes toward the acceptability of domestic violence and their responses when dealing with victims of domestic violence.

Methods. The sample consisted of 322 healthcare professionals (physicians, dentists, nursing staff and other healthcare workers; 85.2% female), who completed a questionnaire, assessing their attitudes towards domestic violence, experience, behaviour and perceived barriers in recognizing and treating domestic violence in the health care sector. The study was cross-sectional and used availability sampling.

Results. The results showed no significant differences in domestic violence acceptability attitudes when comparing groups of healthcare professionals who reported low or high frequency of domestic violence cases encounters. Furthermore, we found that domestic violence acceptability attitudes were negatively associated with action taking when the frequency of encounters with domestic violence cases was high and medium. However, the attitudes were not associated with action taking when the frequency of encounters with domestic violence cases was low.

Conclusions. The results highlight the important role of attitudes in action taking of healthcare professionals when it comes to domestic violence. This indicates the need for educational interventions that specifically target healthcare professionals' attitudes towards domestic violence.

IZVLEČEK

Ključne besede:

nasilje v družini,
stališča, ukrepanje,
prepoznavanje,
zdravstveno osebje

Izhodišča. Nasilje v družini (NVD) je javnozdravstveni problem, ki ga označuje visoka prevalenca v splošni populaciji. Zdravstveno osebje ima pomembno vlogo pri prepoznavi in obravnavi NVD. Posledično je raziskovanje faktorjev, ki prispevajo k primernim odzivom zdravstvenega osebja ob prepoznanem NVD, ključnega pomena. Namen te študije je bil preveriti odnos med stališči zdravstvenega osebja o sprejemljivosti nasilja v družini in njihovimi odzivi ob obravnavi žrtev NVD.

Metoda. Končni vzorec je sestavljalo 322 strokovnjakov s področja zdravstva (zdravniki, zobozdravniki, osebje zdravstvene nege in ostali delavci v zdravstvu; 85,2 % žensk). Udeleženci so izpolnili vprašalnik, ki je ocenjeval njihova stališča do NVD, izkušnje, odzive in zaznane ovire pri obravnavi NVD v zdravstvu. Študija je bila prečna. Vključen je bil priložnostni vzorec.

Rezultati. Rezultati niso pokazali pomembnih razlik v stališčih o sprejemljivosti nasilja, ko smo primerjali skupine zdravstvenih delavcev, ki se z nasiljem srečujejo pogosto, ter tiste, ki se z obravnavo NVD srečujejo redko. Rezultati so pokazali tudi, da se stališča o sprejemljivosti NVD negativno povezujejo z ustreznimi odzivi zdravstvenega osebja pri obravnavi žrtev NVD. Ta odnos je bil najbolj izražen v primerih, ko se je zdravstveno osebje z žrtvami NVD srečevalo bolj pogosto. Stališča o sprejemljivosti NVD se z odzivi zdravstvenega osebja niso pomembno povezovala v primerih, ko je zdravstveno osebje poročalo o redkih oziroma neobstojećih stikih z NVD v njihovi praksi.

Zaključki. Rezultati nakazujejo na pomembno vlogo stališč o sprejemljivosti nasilja pri ustreznem odzivu zdravstvenega osebja ob obravnavi žrtev NVD. To nakazuje na potrebo po izobraževanjih, ki se specifično ukvarjajo s stališči zdravstvenega osebja do NVD.

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1 INTRODUCTION

Domestic violence is defined as “any use of physical, sexual, psychological or economic violence of one family member against the other family member and neglect of a family member, irrespective of a person’s age, gender or any other personal circumstance of the victim or the perpetrator of violence” (1). In Slovenia, the prevalence of intimate partner violence is estimated to be anywhere from 15% to 17% (2-4).

Exposure to domestic violence can have many negative effects on the victim’s health (5) and leads to an increased use of health care services (6). This provides healthcare professionals with an opportunity to access the victims of domestic violence and offer the appropriate support and help. However, studies show that healthcare professionals often miss the chance to help the victims of domestic violence (7). Reasons for this vary and can include problems with recognizing the victims of domestic violence and also inappropriate reactions when domestic violence is recognized. In line with that, studies show that clinicians recognize only one out of 20 victims of domestic violence on average (8). Even in those cases when the clinicians identify the victim of domestic violence, they often don’t respond in an appropriate manner. According to the Family Violence Protection Act (1), adopted Slovenia in 2008, healthcare professionals are obligated to report any suspicions of domestic abuse. Therefore, conducting research on the factors that either inhibit or facilitate the appropriate actions of healthcare professionals in the case of domestic violence is of the utmost importance.

Next to well-developed protocols on a systemic level, working with domestic violence also requires a professional approach and compliance with moral and ethical norms on behalf of the individual working with victims of domestic violence. The attitudes towards domestic violence held by healthcare professionals therefore also play an important role in the treatment of domestic violence (9). In the literature, attitudes are defined as the combination of evaluations (10), emotions (11) and cognitions (12) in relation to different social situations and objects, that function as a permanent readiness to behave in a certain manner. They are usually stable over a longer period, but can also change over time (10). The theories of predicting individual’s behaviour postulate that attitudes play an important role in a decision to act a certain way. Attitudes can, for example, serve as the motivation to act in a certain way by making individuals feel like they are capable of a certain behaviour (13). In a similar manner, the attitudes of healthcare professional can facilitate behaviours, due to a belief that it will lead to desired outcomes (14).

Attitudes are formed through interactions in social environments and have an effect on the behaviour of

individuals (10). However, the relationship between attitudes and behaviour seems to be much more complicated, with the proposed causation running in both directions, i.e. - attitudes leading to behaviour and behaviour (experiences) leading to attitudes (15, 16). Despite the different theoretical postulations, there is a general consensus that there is a strong correlation between attitudes and behaviour (17). Therefore, we can assume that healthcare professionals’ attitudes towards domestic violence importantly contribute to the way that healthcare professionals act when they recognize domestic violence victims.

Previous studies examining healthcare professionals’ attitudes toward domestic violence showed that healthcare professionals have low levels of awareness, knowledge, competences and a lot of misconceptions and prejudices about domestic violence (18-20). However, most of the studies that examine the attitudes of healthcare professionals in relation to their actions when dealing with domestic violence victims only ask the participant to state their opinion about the possible barriers that negatively contribute to domestic violence recognition (21, 22). There are some recent studies that go beyond just asking the participants about their opinion on factors that contribute negatively to the treatment of domestic violence and measure the healthcare professionals’ attitudes directly, however, they do not relate these measures to the measures of actions taken when dealing with domestic violence (23). For example, a study by Wong and colleagues (24) interviewed family doctors after completing a training program on partner abuse and found that, when asked about the importance of attitudes in their practice, the doctors seem to agree that this has an important role. However, the descriptive nature of qualitative data does not enable a detailed analysis of the relationships between these concepts. Due to the undeniable necessity of abovementioned studies, further studies that bridge this gap and relate measures of attitudes directly to the reported actions of healthcare professionals in the case of domestic violence are needed. The main objective of the study was to examine the relationship between healthcare professionals’ attitudes toward the acceptability of domestic violence and their responses when dealing with victims of domestic violence. More specifically, we examined the association between actions taken in the case of domestic violence and healthcare professionals’ attitudes about domestic violence and the frequency of encounters with domestic violence cases.

The specific hypotheses we tested were: (I) healthcare professionals’ who encounter cases of domestic violence more frequently in their practice will perceive domestic violence as less acceptable, when compared to those who have rarely encountered domestic violence cases, (II)

the attitudes about domestic violence acceptability will be negatively associated with healthcare professionals' action taking for more frequent encounters with domestic violence cases and (III) the attitudes about domestic violence acceptability will not be associated with action taking for rare encounters with domestic violence cases.

2 METHODS

2.1 Participants

A total of 488 participants employed in the Slovenian health care sector were included in the broader study of the project Recognizing and treating victims of domestic violence in health care settings: Guidelines and training for health professionals (POND_SiZdrav; (25)). In the present study only participants who already encountered cases of domestic violence at their work were included, therefore the final sample consisted of 322 participants (refer to Results for demographic data).

2.2 Instruments

A questionnaire measuring different aspects of recognition and treatment of domestic violence for healthcare professionals was developed for the purposes of the broader study (25). The questionnaire was used to assess healthcare professionals' attitudes, experience, behaviour and perceived barriers in recognizing and treating domestic violence in health care sector. The participants used a 5-point scale (1 - I completely disagree, 5 - I completely agree), to complete the measures.

2.2.1 Attitudes towards Domestic Violence

The measure consists of 17 items assessing healthcare professionals' attitudes towards domestic violence (e.g., Domestic violence is a private matter). A principal component analysis was used to reduce the included items to a smaller set of variables (i.e., principal components). The results suggested a four-component solution, reducing the initial 17 items to four components measuring different aspects of attitudes towards domestic violence. The components were: attitudes linked to environment and culture, attitudes towards the characteristics of the family and their members, attitudes towards acceptability of domestic violence, and attitudes towards socioeconomic status in relation to domestic violence. In line with the postulated hypotheses of the study, our interest lied in one of the extracted components - the attitudes towards acceptability of domestic violence. This variable consisted of three items: (1) Domestic violence is a private matter, (2) Domestic violence is normal and (3) The victims of domestic violence are provoking the violence and are responsible for the violence they experience. The final score of the measure of attitudes towards acceptability of domestic violence was computed

by taking the average of the three items listed, resulting in a score from 1 to 5, where a higher score represents a stronger belief in the acceptability of domestic violence.

2.2.2 Experience and Behaviour when Encountering Victims of Domestic Violence in the Practice

The measure consists of 14 items assessing healthcare professionals' experience and behaviour when dealing with domestic violence cases. (e.g., I use the prescribed protocol for dealing with victims of domestic violence at my work.). To reduce the number of initial items to a smaller set of variables, a principal component analysis was conducted. The results suggested a three-component solution: behaviour related to the recognition of domestic violence, taking action when recognizing domestic violence, and response when recognizing domestic violence (such as offering support etc.). Again, as postulated in the hypotheses of the present study, we were interested in action taking when recognizing domestic violence from this part of a questionnaire. This component consisted of the following items: (1) I use the stipulated protocol for treating the victims of domestic violence, (2) If I recognize a victim of domestic violence I report this to the police, (3) If I recognize the victim of domestic violence I report this to social services, (4) If I recognize a victim of domestic violence I report this to the prosecution, (5) I have different information materials available and I forward those to the victim of domestic violence. The final score was computed by taking the average of the three items listed, resulting in a score from 1 to 5, where a higher score represents a more appropriate response in the case of an encounter with a domestic violence case.

2.2.3 Frequency of Encounters with Domestic Violence

This was assessed with the question: How often do you encounter cases of domestic violence at your work? Participants responded on 5-point scale (1 - very rarely or never, 5 - very often or always). A higher score represents a higher frequency of encounters with domestic violence.

2.3 Procedure and Statistical Analyses

Data collection was carried out from April to June 2015. The study was cross-sectional and used availability sampling. Participants were recruited through invitations published on various websites (the project website) and mailing lists. A total of 1581 individuals clicked on the link to the questionnaire, with 488 complete entries. This gives rise to a 31% response rate, which is comparable to the results of meta-analyses of response rates in email surveys (26).

The difference between domestic violence acceptability attitudes for those with high and low frequency of encounters with domestic violence cases was examined

using the Mann-Whitney U test for independent samples. The groups of high and low frequency of encounters with domestic violence cases ($n_{low}=138$, $n_{high}=182$) were created with the use of the median split.

The main effects of domestic violence acceptability attitudes and the frequency encounters with domestic violence and their interactions were examined in relation to taking action when recognizing domestic violence using hierarchical linear regression (27). Due to the statistically significant interaction we analysed the effects of domestic violence acceptability attitudes on action taking separately, for frequent (1 SD above the mean), medium (mean) and rare encounters (1 SD below the mean) with domestic violence cases, by examining simple slopes (28). Analyses were carried out with SPSS 22 (29) and R version 3.2.2015-06-07 (30).

3 RESULTS

3.1 Demographics of Participants

The sample included 322 participants (85.2% female, 14.8% male). The age of the participants ranged from 21 to 72 years ($M=43.5\pm 11.0$). Sample consisted of physicians and dentists (56.4%), healthcare personnel (32.4%), and other employees in the health care sector (11.2%; e. g. psychologists, social workers, administrative staff). Most of the participants reported working in the field of family or general medicine (37.8%), followed by psychiatry (8.8%), pediatrics (8.2%), and gynaecology (6.0%). Employees from other fields were represented in the sample in less than six percent.

3.2 Descriptive Statistics

In the current study, we examined the relationship between attitudes about the acceptability of domestic violence, the frequency of encounters with domestic violence cases and action taking when domestic violence is recognized by healthcare professionals.

We examined the descriptive statistics for the three main variables of interest. The mean values for domestic violence acceptability attitudes, frequency of encounters with domestic violence cases and action taking were 1.72 ± 55 , 2.19 ± 92 and 2.63 ± 81 , respectively. Attitudes about the acceptability of domestic violence were statistically significantly correlated with action taking ($r=-.13$, $p<.05$) but not with frequency of encounters ($p>.05$). The correlation between action taking and frequency of encounters was also statistically significant ($r=.27$, $p<.01$).

3.3 The Relationship between Attitudes, Frequency and Action Taking

The results showed no significant differences in domestic violence acceptability attitudes between those who

encounter domestic violence cases rarely ($M=1.75\pm .58$) as compared with those who encounter domestic violence cases in their practice often ($M=1.68\pm .52$); $U=4786.50$, $p=.49$.

The results of the regression analysis, examining the relationship between domestic violence acceptability attitudes, the frequency of encounters with domestic violence cases and action taking, are shown in Table 1.

Table 1. Results of hierarchical regression for action taking in domestic violence cases.

Predictor	ΔR^2	B	95 % CI for B	B
Step 1				
	.09**			
Gender		.24	[-.03, .52]	.09
DV acceptability attitudes		-.36	[-.68, -.04]	-.12**
Frequency of DV cases		.30	[.19, .42]	.27***
Step 2				
	.02*			
Gender		.26	[-.02, .53]	.09
DV acceptability attitudes		-.41	[-.67, -.04]	-.12**
Frequency of DV cases		.30	[.18, .41]	.26***
Attitudes x frequency interaction		-.46	[-.86, -.08]	-.13*
R2				
	.11**			

Notes: DV=domestic violence
* $p<.05$; ** $p<.01$; *** $p<.001$.

As expected, the interaction term was statistically significant ($p<.05$). The results of the follow-up simple slope analysis of the relationship between violence acceptability attitudes and action taking are presented in Figure 1.

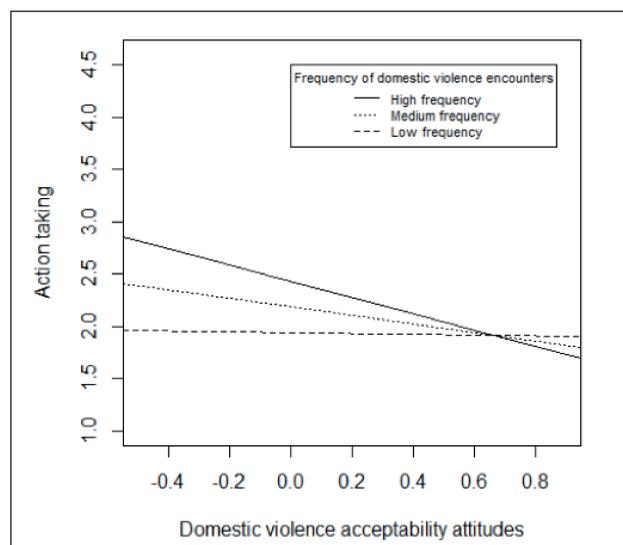


Figure 1. Regression slopes showing the predictive value of attitudes on action taking, separately for different frequencies of encounters with domestic violence.

The simple slopes analysis showed a significant negative association between the domestic violence acceptability attitudes and action taking for high and medium frequency of encounters with domestic violence cases (high: $B=-.78$, $t(3)=-3.44$, $p=.001$; medium: $B=-.14$, $t(3)=-2.58$, $p=.01$). For low frequency of encounters with domestic violence cases, the domestic violence acceptability attitudes were not associated with action taking ($B=-.04$, $t(3)=-.18$, $p=.86$).

4 DISCUSSION

The purpose of the present study was to examine the relationship between domestic violence acceptability attitudes and action taking in health care professionals. Specifically, we were interested in the role of domestic violence acceptability attitudes and the frequency of domestic violence cases in their practice in action taking. The results showed no significant differences in domestic violence acceptability attitudes, when comparing groups of healthcare professionals who reported low or high frequency of domestic violence cases encounters. Based on these results, the frequency of encounters with domestic violence does not play an important role in the healthcare professionals' attitudes about the acceptability of domestic violence. This is not in line with the expectations and theoretical postulations, as attitudes are expected to form and change with experience (15). This finding, however, must be interpreted with some methodological drawbacks in mind. Our data showed that, overall, the average value on the acceptability of domestic violence attitudes scale was low (see Results; Descriptive statistics). Considering the fact that the attitudes were measured on a scale from one to five, we can see that healthcare professionals, on average, do not consider domestic violence acceptable. Thus, it is possible that the lack of significant differences is also a reflection of the overall low variability of our data when looking at the domestic violence acceptability attitudes. With this in mind, we were interested in whether those subtle differences in attitudes play a role in the appropriate action taking by the healthcare professional when dealing with domestic violence cases. The results showed a very distinctive pattern for various frequencies of dealing with domestic violence cases. More specifically, we found that the healthcare professionals who believe that domestic violence is acceptable tend to respond in less appropriate ways when dealing with a victim of domestic violence. This is especially the case when these encounters with domestic violence victims are of medium or high frequency (see Figure 1). These results show that attitudes about domestic violence have a significant role in the way healthcare professionals act when coming

across cases of domestic violence in their own practice. This finding is in line with the expectations and social psychology theories that postulate a relationship between attitudes and behaviours (in our case, action taking) (15, 16).

The results highlight the important role of attitudes and action taking of healthcare professionals when it comes to domestic violence. Our study showed that the role of attitudes on action taking increases with increasing the frequency of coming into contact with domestic violence cases. Nevertheless, considering the high prevalence of domestic violence cases, the majority of healthcare professionals are expected to come into contact with a victim of domestic violence during their professional career. Based on our data, the negative effects of domestic violence acceptability attitudes start showing at a relatively low frequency of encounters. More specifically, the effects were not significant only for the lowest frequency (i.e., those who reported absent or very rare encounters with domestic violence cases). If we combine this finding with the fact that the frequencies reported in our sample were fairly low (see Table 1), the importance of domestic violence acceptability attitudes when it comes to healthcare professionals' action taking can be emphasised even more. This indicates the need for educational interventions that specifically target healthcare professionals' attitudes towards domestic violence. This conclusion is also in line with the qualitative research done in the field of domestic violence that found that doctors can improve their awareness of partner abuse in daily practice if they also become more sensitised to the issue and more comfortable with exploring their own attitudes towards abuse (24).

4.1 Limitations

Our study had some limitations, which need to be accounted for when interpreting the results. Firstly, our sample is biased and not representative; therefore, the generalisation of our findings to a larger population of healthcare professionals is not possible. Secondly, the study was cross-sectional and based on self-report data, which also limits the reliability of our conclusions. Another drawback is the use of a questionnaire that is not validated and standardised. Due to the non-experimental nature of the study, we are also not able to infer any causality between the studied constructs. Experimental and longitudinal studies are necessary to examine these relationships in more detail. Studies which focus on exact evaluations of interventions that target the attitudes of healthcare professionals on their actions when dealing with domestic violence cases are also necessary.

5 CONCLUSION

Overall, the results of this study emphasise the important role of attitudes when it comes to action taking of healthcare professionals in cases of domestic violence. More specifically, seeing domestic violence as more acceptable relates to less appropriate action taking, with this relationship being particularly strong for higher frequency of encounters with victims of domestic violence. Since victims of domestic violence are frequent users of health care services, our results point to a strong need for educational programmes specifically designed for targeting the attitudes that healthcare professionals have about domestic violence.

CONFLICTS OF INTEREST

The authors declare that no conflicts of interest exist.

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ETHICAL APPROVAL

The research was realised in accordance with the terms of the "Declaration of Helsinki for recommendations guiding physicians in biomedical research involving human subjects" (<http://www.cirp.org/library/ethics/helsinki/>).

REFERENCES

- Zakon o preprečevanju nasilja v družini (ZPND). Pub. L. No. 003-02-2/2008-9, (Feb, 11, 2008).
- Kopčavar Guček N, Svab I, Selic P. The prevalence of domestic violence in primary care patients in Slovenia in a five-year period (2005-2009). *Croat Med J* 2011; 52: 728-34.
- Selic P, Svab I, Guček NK. How many Slovenian family practice attendees are victims of intimate partner violence? a re-evaluation cross-sectional study report. *BMC Public Health*; 2013; 13: 703.
- Selič P, Pesjak K, Kopčavar Guček N, Kersnik J. Factors that increase likelihood of violence in the family and seeking for help at family practitioner: pilot study about violence in the family. *Zdrav Vestn* 2008; 77: 505-10.
- Leskošek V. The health condition of female victims of violence. *Zdr Varst* 2013; 52: 148-56.
- Bergman B, Brismar B, Nordin C. Utilisation of medical care by abused women. *BMJ* 1992; 305: 27-8.
- Riggs DS, Caulfield MB, Street AE. Risk for domestic violence: factors associated with perpetration and victimization. *J Clin Psychol* 2000 ; 56: 1289-316.
- Elliott L, Nerney M, Jones T, Friedmann PD. Barriers to screening for domestic violence. *J Gen Intern Med* 2002; 17: 112-6.
- Kopčavar Guček N. Pristojnosti zdravstvenih ustanov na področju preprečevanja nasilja v družini. In: Veselič Š, Horvat D, Plaz M, editors. *Priročnik za delo z ženskami in otroki z izkušnjo nasilja*: izdaja ob 25 letnici delovanja Društva SOS telefon. Ljubljana: Društvo SOS telefon za ženske in otroke - žrtve nasilja, 2004: 220-35.
- Eagly AH, Chaiken S. *The psychology of attitudes*. Florida: Harcourt Brace Jovanovich College Publishers, 1993.
- Greenwald AG. Why are attitudes important? In: Pratkanis AR, Breckler SJ, Greenwald AG, editors. *Attitude structure and function*. New Jersey: Erlbaum, 1989: 429-40.
- Kruglanski AW. The psychology of being "right": the problem of accuracy in social perception and cognition. *Psychol Bull* 1989; 106: 395-409.
- Bandura A. Self-efficacy: toward a unifying theory of behavioral change. *Psychol Rev* 1977; 84: 191-215.
- Ajzen I, Fishbein M. *Understanding attitudes and predicting social behavior*. New Jersey: Prentice-Hall, 1980.
- Fishbein M, Ajzen I. *Belief, attitude, intention and behavior: an introduction to theory and research*. Massachusetts: Addison-Wesley, 1975.
- Glasman LR, Albarracín D. Forming attitudes that predict behavior: a meta-analysis of the attitude-behavior relation. *Psychol Bull* 2006; 132: 778-822.
- Rebellion CJ, Manasse ME, Van Gundy KT, Cohn ES. Rationalizing delinquency: longitudinal test of the reciprocal relationship between delinquent attitudes and behavior. *Soc Psychol Q* 2014; 77: 361-86.
- Tilden VP, Schmidt TA, Limandri BJ, Chiodo GT, Garland MJ, Loveless PA. Factors that influence clinicians' assessment and management of family violence. *Am J Public Health* 1994; 84: 628-33.
- Sugg NK, Thompson RS, Thompson DC, Maiuro R, Rivara FP. Domestic violence and primary care: attitudes, practices, and beliefs. *Arch Fam Med* 1999; 8: 301-6.
- Schols MWA, de Ruiter C, Öry FG. How do public child healthcare professionals and primary school teachers identify and handle child abuse cases?: a qualitative study. *BMC Public Health* 2013; 13: 807.
- Love C, Gerbert B, Caspers N, Bronstone A, Perry D, Bird W. Dentists' attitudes and behaviors regarding domestic violence: the need for an effective response. *J Am Dent Assoc* 2001; 132: 85-93.
- Kopčavar Guček N, Petek D, Švab I, Selič P. Barriers to screening and possibilities for active detection of family medicine attendees exposed to intimate partner violence. *Zdr Varst* 2016; 55: 11-20.
- Djikanovic B, Lo Fo Wong S, Simic S, Marinkovic J, Van Weel C, Lagro-Janssen A. Physicians' attitudes and preparedness to deal with intimate partner violence against women in Serbia. *J Fam Violence* 2015; 30: 445-52.
- Wong SLF, Wester F, Mol S, Lagro-Janssen T. "I am not frustrated anymore". Family doctors' evaluation of a comprehensive training on partner abuse. *Patient Educ Couns* 2007; 66: 127-37.
- Cukut Krilič S, Modic KU, Smrke U, Šimenc J, Zver Makovec M, Šprah L et al. *Nasilje v družini in zdravstvena dejavnost: kvantitativna in kvalitativna raziskava - končno poročilo projekta Pond_SiZdrav*. Ljubljana: Družbenomedicinski Inštitut ZRC SAZU, 2015.
- Sheehan KB. E-mail survey response rates: a review. *J Comput-Mediat Comm* 2001; 6.
- Alexopoulos EC. *Introduction to multivariate regression analysis*. Hippokratia; 14: 23-8.
- Aiken LS, West SG. *Multiple regression: testing and interpreting interactions*. California: SAGE Publications, 1991.
- IBM Corp. *IBM SPSS Statistics for Windows, Version 22.0*. New York: IBM Corp, 2013.
- R Core Team: *A language and environment for statistical computing*. Vienna: R foundation for statistical computing, 2015.