

Original Article

# Development of preparedness to respond to intimate partner violence scale among mental health professionals

Mysore Narasimha Vrandal<sup>1</sup>, Navaneetham Janardhana<sup>1</sup>, Channaveerachari Naveen Kumar<sup>2</sup>

Departments of <sup>1</sup>Psychiatric Social Work and <sup>2</sup>Psychiatry, National Institute of Mental Health and Neuro Sciences, Bengaluru, Karnataka, India.

## ABSTRACT

**Objectives:** Violence against women has been associated with serious health and mental health consequences. Health-care professionals play an important role in screening and providing care and support to victims of intimate partner violence (IPV) in the hospital setting. There is no culturally relevant tool to assess the mental health professional (MHP) preparedness to screen for partner violence in the clinical setting. This research aimed towards developing and standardizing scale to measure MHP preparedness and perceived skills in responding to IPV in the clinical setting.

**Materials and Methods:** The scale was field tested with 200 subjects using consecutive sampling at a tertiary care hospital.

**Results:** The exploratory factor analysis resulted in five factors constituting 59.2% of the total variance. The internal consistency Cronbach alpha 0.72 for the final 32-item scale was highly reliable and adequate.

**Conclusion:** The final version of the Preparedness to Respond to IPV (PR-IPV) scale measures MHP PR-IPV in the clinical setting. Further, the scale can be used to evaluate the outcome of IPV interventions in different settings.

**Keywords:** Providers, Violence, Screening, Respond, Preparedness

## INTRODUCTION

Violence against women is a major public health concern. Despite the progressive legislation to prevent violence, around one-third of women aged 15–49 years have undergone physical violence.<sup>[1]</sup> Intimate partner violence (IPV) is a major cause of mortality and morbidity among women, resulting in negative health and psychiatric outcomes. IPV has been associated with miscarriages, premature labor, neonatal deaths, vaginal bleeding, urinary tract infections, depression, PTSD, suicides, and substance use.<sup>[2-7]</sup> From the gender-vulnerability framework, women with psychiatric illness are at increased risk of IPV and more likely to attempt suicide as a result of partner violence.<sup>[8]</sup> The lifetime prevalence of IPV among female and male psychiatric patients is 16–94% and 18–48%, respectively.<sup>[9]</sup>

Many women with mental illness experiencing IPV are hesitant to disclose violence to clinicians as they fear retaliation and increased threat of violence by the abusive perpetrators.<sup>[10]</sup> Mental health professionals (MHPs) play a key role in addressing IPV in the clinical setting. Despite

the WHO's recommendation for universal IPV screening, MHPs fail to routinely screen for IPV.<sup>[11-13]</sup> Various studies have shown that MHPs attribute their reluctance to ask for violence due to inadequate preparedness and training, fear of offending victims, lack of privacy, and personal discomfort in inquiring about IPV.<sup>[14-17]</sup> The factor that limits the screening of IPV is a lack of standardized tools to measure the preparedness to respond (PR) to the victims of violence and related practice in clinical settings.

Few available scales measure clinicians' attitudes and opinions about IPV in health-care settings. The frequently used scales are the Bristol Domestic Violence Study,<sup>[18]</sup> DV-related attitude, belief, and self-reported measure,<sup>[19]</sup> and the Domestic Violence Health Care Provider Survey,<sup>[20]</sup> which measures attitude, opinions, and organizational barriers in the screening of violence in the clinical setting. Moreover, these scales are of Western origin and are appropriate for the Western cultural context. The present research directed toward developing a comprehensive scale to measure MHP PR-IPV in the clinical setting.

\*Corresponding author: Mysore Narasimha Vrandal, Department of Psychiatric Social Work, National Institute of Mental Health and Neuro Sciences, Bengaluru, Karnataka, India. [vrindamn@gmail.com](mailto:vrindamn@gmail.com)

Received: 13 September 2022 Accepted: 20 September 2022 Epub Ahead of Print: 06 December 2022 Published: 27 January 2023 DOI: 10.25259/JNRP-2022-4-31

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## MATERIALS AND METHODS

### Setting

The research was conducted at a tertiary care mental health hospital in Southern India. A convenient sampling technique was adopted for the recruitment of the subjects.

### The process scale construction and standardization

#### Generation of Item for the scale and consensual validation

Initially, 75 items for the scale were generated through a review of existing literature, and in-depth interviews with six MHPs specialized in women's mental health. The draft 75-item scale was consensual validated by the ten MHPs. The items were examined for their cultural relevance, clarity, and readability level of the subjects. All those items that were vague, irrelevant, ambiguous, lengthy, and conveying more than single-thought and double-negative items were omitted from the tool. After this exclusion, 40 items were retained in the scale. The initial version of the PR-IPV scale had 40 items which were grouped under three domains: Attitude and opinion (12 items), knowledge (15 items), and preparedness (13 items).

#### Construct validity of the scale

##### Sample size

The reliable estimation for factor analysis depends on the larger sample size. The sample size of 200 was derived based on the variable to subjects ratio of 1:5.<sup>[21-25]</sup> Those MHPs consisting of teaching faculty, residents, and trainees from different departments were included in the research. The MHPs who were unwilling to participate in the research were excluded from the study. The data collection was done after obtaining informed consent from the participants. The research was approved by the Ethics Committee of Behavioral Division, NIMHANS.

## RESULTS

The initial 40 items scale was field-tested to understand the level of measurability of the items and further reduce the items in a meaningful manner. The mean age of the participants was  $33.86 \pm 6.61$ . The majority (58%) were females and 66.5% were unmarried. Among 200 participants, 30% were pre-doctoral and doctoral psychiatric social trainees, 21% were psychiatrists and junior residents, 17.5% were pre-doctoral and doctoral clinical psychology trainees, 12.5% were full-time psychiatric social workers, 11.5% were clinical psychologists, and 7.5% were psychiatric nursing trainees.

The factor structure of the scale was analyzed using an exploratory factor analysis (EPA) as the scale was not based

pre-determined assumption. From the EPA analysis, certain items may either split or merge with the exiting factor or form a new construct. Hence, principal component analysis using a varimax rotation was performed. Kaiser criterion of factor loading of 0.30 was considered to retain the items.<sup>[26,27]</sup> The factor analysis revealed that the main components were regrouped into five factors with 32 final items, constituting 59.2% of the variance among the observed variables. The first factor constituted ten items labeled as "Professionals Preparedness," Factor 2 consisted six items named as "Victim Blaming," Factor 3 consisted five items labeled as "Perpetrator Blaming," fourth factor contained five items labeled as "Knowledge and Opinion (KO)," and the fifth factor included six items named as "Perceived Self-efficacy (PS)." The results of mean scores and the rotated principal component matrix are shown in [Tables 1 and 2]. The total mean score PR-IPV scale was 115.64 with an SD = 10.20. The reliability coefficients for the 32-item scale using internal consistency Cronbach Alpha ( $\alpha$ ) ranged from 0.63 to 0.82. The overall Cronbach  $\alpha$  0.73 indicated a highly reliable coefficient value for the new scale [Table 3].

## DISCUSSION

In this research, we have developed and standardized self-reported PR-IPV scale to measure MHPs preparedness and readiness to respond to violence in health settings. The factor analysis of the scale resulted in five factors. Factor 1 emerged as the *professional's preparedness subscale* with the maximum number of items loaded significantly under this domain which explained 23.7% of the variance. Factor 2 emerged as the *victim-blaming subscale* explained 10.9% of the variation, which was part of the knowledge component of the initial scale. The present study's findings concurred with research by John and Lawoko<sup>[28]</sup> and Lawoko *et al.*<sup>[20]</sup> where "victim personality/trait," "victim disobedience," and "blame victim" emerged as separate subscales. Factor 3 with five items emerged as "perpetrator blame" constituted 8.8% of the variance. Factor 4 reflected the KO component, with six items explaining 8.9% variance. Factor 5 reflected PS, with six items contributing 6.9% of the total item on the scale. Mathur

**Table 1:** Mean scores of final 32-item PR-IPV scale.

PR-IPV scale domains	Mean (n=200)	SD
PP	37.79	3.87
VB	22.09	3.56
PB	17.35	3.78
KO	16.99	3.66
PS	21.41	2.00
Total PR-IPV scores	115.64	10.20

PR-IPV: Preparedness to respond to intimate partner violence, PP: Professionals' preparedness, VB: Victim blaming, PB: Perpetrator blaming, KO: Knowledge, and opinion, PS: Perceived self-efficacy

**Table 2:** Rotated component matrix of 32-item PR-IPV scale.

32-item PR-IPV scale	Factor loading				
	I	II	III	IV	V
1. I am equipped to ask appropriate questions about IPV	0.859				
2. I can help a female patient who has been exposed to IPV to assess her risk of harm by the perpetrator	0.853				
3. I feel hesitant to ask about IPV because I have little experience in dealing with IPV situation	0.768				
4. I can determine the lethality of a female patient experiencing IPV	0.650				
5. I ask about IPV when an injury is noticed irrespective of the stated reason by a female patient	0.632				
6. I respond appropriately to the disclosure of IPV by a female patient	0.881				
7. I routinely screen all new female patients about abuse in their relationships	0.678				
8. I am afraid of offending the patient if I ask about IPV	0.684				
9. I can provide an appropriate therapeutic psychosocial intervention to a female patient experiencing IPV based on the stage of her readiness to change	0.676				
10. I follow-up with a female patient after making a referral in the community	0.658				
11. Few women deserve to be beaten up for provoking their spouses/partners		0.454			
12. It is the victim's fault that she has been abused		0.542			
13. Some women unconsciously want their partners to control them		0.605			
14. Stepping out of traditional roles is a major cause of IPV against women		0.545			
15. Victim of IPV tends to exaggerate the actions of their perpetrator/s		0.558			
16. The passive and dependent personality of the victim often leads to abuse		0.569			
17. Men who resort to violence against women may be suffering from a mental illness			0.801		
18. Men who abuse their wives grew up in a violent family			0.558		
19. Perpetrators of IPV have trouble controlling their anger			0.774		
20. Alcohol and drug abuse are the common causes of IPV			0.706		
21. IPV can be attributed to peculiarities of the perpetrator's personality			0.709		
22. DV is only a physical abuse				0.633	
23. It is OK for men to abuse women once in a while as it is their right				0.534	
24. IPV happens only in married couples.				0.772	
25. Women should come out of the abusive relationship and become independent				0.484	
26. A victim of IPV should live with the hope that one day violence will stop				0.550	
27. I can do little help if the victim refuses to acknowledge the abuse					0.666
28. I can help the victim of IPV to create a safety plan to prevent abuse					0.834
29. I am aware of resources available in the community to help the victim of IPV					0.765
30. I am hesitant to intervene in case I make matters worse					0.706
31. I can make appropriate referrals for abused patients					0.603
32. I can use strategies to help victims of IPV change their situation					0.762
<b>Dimension of PR-IPV scale</b>					<b>Items</b>
PP Scale (ten items)					1–10
VB Scale (six items)					11–16
PB Scale (five items)					17–21
KO Scale (five items)					22–26
PS Scale (six items)					27–32
Scoring: Strongly Agree ( 5), Agree (4), Somewhat Agree (3), Disagree ( 2), and Strongly Disagree (1)					
PR-IPV: Preparedness to respond to intimate partner violence, PP: Professionals preparedness, VB: Victim blaming, PB: Perpetrator blaming, KO: Knowledge, and opinion, PS: Perceived self-efficacy					

et al.<sup>[29]</sup> and Sugg and Inui<sup>[30]</sup> reported a lack of knowledge, training, and PS as core barriers to screening and providing needed support to IPV victims among MHPs. The overall Cronbach alpha value of 0.73 indicates higher reliability for the final scale.<sup>[31]</sup>

The scale has potential utility in several different ways: (a) The scale can be used as a pre- and post-test to measure clinicians' knowledge, opinion, preparedness, and perceived

skills to respond to disclosure of IPV and to evaluate the outcome of training or other intervention program over the period and (b) it can also be administered among physicians to measure the level of preparedness and perceived skills to handle IPV in the clinical setting.

Further research needs to be done to assess the stability and utility of the scale with different populations such as physicians, general nurses, family counselors, and ASHA

**Table 3:** Internal consistency Cronbach's alpha of final 32-item PR-IPV scale.

Domains of PR-IPV scale	Internal consistency Cronbach ( $\alpha$ ). (n=200)
PP	0.68
VB	0.63
PB	0.79
KO	0.78
PS	0.82
Total PR-IPV Scores	0.73

PR-IPV: Preparedness to respond to intimate partner violence, PP: Professionals preparedness, VB: Victim blaming, PB: Perpetrator blaming, KO: Knowledge, and opinion, PS: Perceived self-efficacy

workers working in the community health-care centers. Further, changes in relationship among PR-IPV items, clinician behaviors and patient's outcomes may be evaluated. Program evaluators and trainees may use the scale to assess the effect of intervention programs.

## CONCLUSION

In conclusion, initial validation of 32-items PR-IPV scale found to be an effective tool of measuring level of preparedness among MHPs to respond to IPV in the clinical setting. Further, this tool can be used to measure the effectiveness of training of MHPs and other health care professionals.

## Declaration of patient consent

The authors certify that they have obtained all appropriate consent.

## Financial support and sponsorship

NIMHANS Intramural Fund, Bengaluru, India.

## Conflicts of interest

There are no conflicts of interest.

## REFERENCES

- National Family Health Survey. National Family Health Survey (NFHS-3)-2005-2006. New Delhi: Ministry of Health and Family Welfare, Government of India; 2007.
- World Health Organization. Responding to Intimate Partner Violence and Sexual violence Against Women: World Health Organization, Clinical and Policy Guidelines. Geneva: World Health Organization; 2013. Available from: <https://www.who.int/reproductivehealth/publications/violence/9789241548595/en> [Last accessed on 2022 Jul 15].
- Shah PS, Shah J, Knowledge Synthesis Group on Determinants of Preterm/LBW Births. Maternal exposure to domestic violence and pregnancy and birth outcomes: A systematic review and meta-analyses. *J Womens Health (Larchmt)* 2010;19:2017-31.
- Ellsberg M, Jansen HA, Heise L, Watts CH, Garcia-Moreno C, WHO Multi-country Study on Women's Health and Domestic Violence against Women Study Team. Intimate partner violence and women's physical and mental health in the WHO multi-country study on women's health and domestic violence: An observational study. *Lancet* 2008;371:1165-72.
- Campbell J, Jones AS, Dienemann J, Kub J, Schollenberger J, O'Campo P, et al. Intimate partner violence and physical health consequences. *Arch Intern Med* 2002;162:1157-63.
- Becker-Dreps S, Morgan D, Peña R, Cortes L, Martin CF, Valladares E. Association between intimate partner violence and irritable bowel syndrome: A population-based study in Nicaragua. *Violence Against Women* 2010;16:832-45.
- Pico-Alfonso MA, Garcia-Linares MI, Celda-Navarro N, Blasco-Ros C, Echeburúa E, Martinez M. The impact of physical, psychological, and sexual intimate male partner violence on women's mental health: Depressive symptoms, posttraumatic stress disorder, state anxiety, and suicide. *J Womens Health (Larchmt)* 2006;15:599-611.
- Khalifesh H, Moran P, Borschmann R, Dean K, Hart C, Osborn D, et al. Domestic and sexual violence against patients with severe mental illness. *Psychol Med* 2015;45:875-86.
- Oram S, Trevillion K, Feder G, Howard LM. Prevalence of experiences of domestic violence among psychiatric patients: Systematic review. *Br J Psychiatry* 2013;202:94-9.
- Vranda MN, Kumar CN, Muralidhar D, Sivakumar PT, Janardhana N. Intimate partner violence, lifetime victimization, sociodemographic and clinical profile of women with psychiatric illness at tertiary care psychiatric hospital in India. *Indian J Psychol Med* 2021;43:525-30.
- World Health Organization. Global and Regional Estimates of Violence Against Women: Prevalence and Health Effects of Intimate Partner Violence and Non-Partner Sexual Violence. Geneva: World Health Organization; 2013.
- World Health Organization. Responding to Intimate Partner Violence and Sexual Violence Against Women: WHO Clinical and Policy Guidelines. Geneva: World Health Organization; 2013.
- Nyame S, Howard LM, Feder G, Trevillion K. A survey of mental health professionals' knowledge, attitudes and preparedness to respond to domestic violence. *J Ment Health* 2013;22:536-43.
- Mauri EM, Nespole A, Persico G, Zobbi VF. Domestic violence during pregnancy: Midwives' experiences. *Midwifery* 2015;31:498-504.
- LoGiudice JA. Prenatal screening for intimate partner violence: A qualitative meta-synthesis. *Appl Nurs Res* 2015;28:2-9.
- Trevillion K, Corker E, Capron LE, Oram S. Improving mental health service responses to domestic violence and abuse. *Int Rev Psychiatry* 2016;28:423-32.
- Erikson MJ, Hill TD, Siegal RM. Barriers to domestic violence screening in the pediatric setting. *Pediatrics* 2001;108:98-102.
- Salmon D, Murphy S, Baird K, Price S. An evaluation of the effectiveness of an educational programme promoting the introduction of routine antenatal enquiry for domestic violence. *Midwifery* 2006;22:6-14.

19. Maiuro RD, Vitaliano PP, Sugg NK, Thompson DC, Rivara FP, Thompson RS. Development of a health care provider survey for domestic violence: Psychometric properties. *Am J Prev Med* 2000;19:245-52.
20. Lawoko S, Sanz S, Helström L, Castren M. Assessing the structural and concurrent validity of a shortened version of the domestic violence healthcare providers' survey questionnaire for use in Sweden. *Psychology* 2012;3:183-91.
21. Comrey AL, Lee HB. *A First Course in Factor Analysis*. Hillsdale, NJ: Lawrence Erlbaum; 1992.
22. Tabachnick BG, Fidell LS. *Using Multivariate Statistics*. Boston, MA: Allyn and Bacon; 2001.
23. Bentler PM, Chou CP. Practical issues in structural modelling. In: Long JS, editors. *Common Problems/Proper Solutions: Avoiding Error in Quantitative Research*. Newbury Park, CA: Sage; 1987.
24. Streiner DL. Figuring out factors: The use and misuse of factor analysis. *Can J Psychiatry* 1994;39:135-140.
25. Bryant FB, Yarnold PR. Principal components analysis and exploratory and confirmatory factor analysis. In: Grimm LG, Yarnold PR, editors. *Reading and Understanding Multivariate Statistics*. Washington, D.C: American Psychological Association; 1995. p. 99-136.
26. Kaiser HF. An analytic rotational criterion for factor analysis. *Am Psychol* 1955;10:438.
27. Cohen J. *Statistical Power Analysis for Behavioral Sciences*. 2<sup>nd</sup> ed. Hillsdale: Lawrence Erlbaum Associates; 1988.
28. John IA, Lawoko S. Assessment of the structural validity of the domestic violence healthcare providers' survey questionnaire using a Nigerian sample. *J Inj Violence Res* 2010;2:75-83.
29. Mathur P, Sharma LP, Najundaswamy MH, Chandra PS. Training needs of psychiatry residents in handling intimate partner violence (IPV) in clinical situation-a survey. *Asian J Psychiatr* 2020;53:102379.
30. Sugg NK, Inui T. Primary care physicians' response to domestic violence: Opening pandora's box. *JAMA* 1992;267:3157-60.
31. Nunnally JC. *The Psychological Theory*. New York: McGraw-Hill Company; 1978.

**How to cite this article:** Vranda MN, Janardhana N, Kumar CN. Development of preparedness to respond to intimate partner violence scale among mental health professionals. *J Neurosci Rural Pract* 2023;14:98-102.