Bangla adaptation of HITS (Hurt-Insult-Threaten-Scream): a unisex domestic violence screening tool

Shoebur Reza Choudhury, Fahmida Ferdous, Nayan Ranjan Sarker

Abstract

Background: Domestic violence represents a worldwide public health issue that can result in short and long-term physical and mental health problems. HITS (Hurt-Insult-Threaten-Scream) was designed as a short instrument to determine domestic violence.

Objectives: The objective of the study was to adapt the Bangla version of the HITS Scale.

Methods: Cultural and linguistic adaptation in Bangla was done by translation, back translation, expert committee review, pretesting and revision of the scale. Then the reliability of the Bangla version of the HITS Scale was determined by employing both the parallel form and test-retest reliability techniques along with measuring Cronbach's alpha for internal consistency. In the parallel form reliability correlation between Bangla and English version was tested by applying the scale on 30 healthy medical professionals. The test-retest reliability of Bangla version of the HITS Scale was tested at two-week time interval. Later the Bangla version of the HITS Scale was applied to 24 participants with self-reported domestic violence and compared with the results of 30 nonclinical healthy medical professional participants.

Results: Cronbach's alpha value found was 0.75 which indicates an acceptable level of reliability. For the parallel form reliability, i.e., correlation between Bangla and English version, the Pearson correlation coefficient found was 0.647. In the test-retest reliability score two weeks apart, in the same healthy medical professionals, correlation coefficient was 0.797. The mean HITS scores for healthy medical professionals, (n=30) and the self-identified victims of domestic abuse (n=24) were 7.30 and 14.17, respectively. The difference in these means was found to be statistically significant (t=14.4, p=.000).

Conclusions: Bangla version of the HITS Scale can be a reliable tool to study domestic violence in both male and female subjects and was able to successfully differentiate between clinical and non-clinical populations.

Declaration of interest: None

Copyright and usage: ©Archives of NIMH 2020

Keywords: Domestic violence; HITS; Bangla HITS.

Introduction

Domestic violence refers to violence, abuse and intimidation between people who are or have been in an intimate relationship.[1] The perpetrator uses violence to control and dominate the other person. This causes fear, physical harm and psychological harm.[1] It is a chronic and potentially life-threatening condition increasingly cited as a risk factor for adverse physical and mental health outcomes that is both preventable and treatable. In a multi-country study sponsored by the World Health Organization on women health and domestic violence against women, it was found that the lifetime prevalence of domestic violence is estimated to be between 15% and 71% among women,[2] whereas in Bangladesh 53% of married women in Dhaka and 62% in Matlab had experienced domestic violence.[3] In Bangladesh,

another study showed 28.5% of the female garments workers were suffering from domestic violence.[4] While most of these cases were of male partners abusing intimate female partners, more recent research suggests that violence against males is also experienced in bisexual as well as in homosexual relationships.[5]

Domestic violence represents a worldwide public health issue that can result in short and long-term physical and mental health problems. Apart from an increased risk of injury and death, persons who experience domestic violence have an increased probability of developing both short-term and long-term morbidity and adopting negative health behaviour.[6] It has been associated with an increase of psychoactive substance use, anxiety, depression, suicidal tendency and symptoms of post-traumatic

stress disorder (PTSD).[7]

Although domestic violence is an important worldwide problem, it is often not easily recognized by physicians.[8] There are many well-established tools to measure domestic or partner violence but they are usually quite lengthy tools not suitable for rapid screening in clinical settings. HITS (Hurt-Insult-Threaten-Scream) was designed as a short instrument for domestic violence screening that could be easily remembered and administered by family physicians.[8] It is now globally used including China, Saudi Arabia, the Middle East, Africa, Europe, and South and North America. It has also been translated into multiple languages including Mandarin Chinese and Arabic.[8] Another wonder of HITS Scale is that it is also validated in male populations.[9]

HITS consists of the following four screening questions: "Over the last 12 months, how often did your partner: physically hurt you, insult you or talk down to you, threaten you with physical harm, and scream or curse at you?" Patients responded to each of these items with a 5-point frequency format: never, rarely, sometimes, fairly often and frequently. Score values ranged from a minimum of 4 to a maximum of 209 with the cut-off score of 10.5.[8] A quite handful of study on domestic violence is reported in Bangladesh but so far in researcher's knowledge, all the studies above were done only on women population. But studies abroad showed males are also suffering a lot from domestic violence.[9] As HITS is also validated for the male population, the properly adapted HITS in Bangla can be a powerful tool to study the issue of domestic violence in both genders.

Methods

For adaptation of Bangla version of the HITS (Hurt-Insult-Threaten-Scream) Scale, the WHO guideline for the process of translation and adaptation of instruments was followed.[10] The items were translated in Bangla and were judged independently by four judges, who are expert in the field of Psychiatry and Psychology. Each item was then modified and selected on the basis of their agreement. Then the Bangla version was given to two experts in English for back translation without giving the original English scale. Then both the back translation and the original scale were given to an expert to confirm whether the translated version has the conceptual and cultural equivalence. Then a pilot study was done and the final version of the HITS Scale was prepared and tested on the clinically self-identified victims of abuse and non-clinical healthy medical professional participants.

The reliability of the Bangla version of the HITS Scale was determined by employing both the parallel form (translation reliability) and test-retest reliability techniques. The parallel form reliability, i.e., correlation of Bangla and English version was tested by administering the scales on 30 healthy medical professionals, who were fluent both in Bangla and English. This was measured by Pearson's correlation coefficient. The test-retest reliability of Bangla version of the HITS Scale was tested by again applying on them with the time interval of two weeks and measured by Pearson's correlation coefficient. Later we admin

istered the Bangla version of the HITS Scale to 24 clinical participants with self-reports of domestic violence and then compared the result with 30 non-clinical healthy medical professional participants. In this phase, data for male and female were also analyzed separately and student's t test was used for analysis.

Results:

The age of the participants ranged from 30 to 56, with a mean of 44.77 (SD =7.42). In the later phase of the study 6 (20%) persons with self-reported domestic violence declined to participate. Hence, the data from 24 (80%) subjects were available for comparison. The age of the victims of domestic violence ranged from 21 to 47, with a mean of 34.96 (SD=7.93).

Table 3: Association between job status and depression severity of the respondents (N=468)

HITS Bangla score	Correlation coefficient with HITS English score	P
Baseline	.647	.000
	Correlation coefficient with HITS Bangla score	
After 2 weeks	.797	.000

**Correlation is significant at the 0.01 level (2 tailed)

Cronbach's alpha value found was 0.75 which indicates an acceptable level of reliability. In the parallel form reliability i.e., correlation Bangla and English version by using 30 subjects, the Pearson correlation coefficient was 0.647 for the two measures (p=.000) which is a moderate positive correlation (Table 1). In the test-retest reliability for the two measures of HITS score two weeks apart in the same healthy medical professionals, correlation coefficient was 0.797 for the two measures (p=.000) which indicates that scores had strong positive correlation (Table 1).

The mean HITS scores for healthy medical professionals (n=30) and the self-identified victims of abuse (n=24) were 7.30 and 14.17, respectively. The difference in these means was found to be statistically significant (t=14.4; p=.000).

In the gender base analysis, the mean HITS scores for healthy male medical professionals (n=17), and the self-identified male victims of abuse (n=8) were 7.41 and 13.63, respectively. The difference in these means was also found to be statistically significant (t=8.97; p=.000). The mean HITS scores for healthy female medical professionals, (n=13) and the self-identified female victims of abuse (n=16) were 7.15 and 14.44, respectively. The difference in these means was found to be statistically significant (t=10.47; p=.000).

In the separate gender base analysis, the mean HITS scores for healthy male medical professionals (n=17) and healthy female medical professionals (n=13) were 7.41 and 7.15, respectively. The difference in these means was not found to be statistically significant (t=0.41; p=.682). In the other gender base analysis, the mean HITS scores for the self-identified male victims of abuse (n=8) and self-identified female victims of abuse (n=16) were 13.63 and 14.44, respectively. The difference in these means were not found to be statistically significant (t=1.02; p=.317).

Discussion

Cronbach's alpha is a statistic commonly quoted by authors to demonstrate the internal consistency of scale items and Cronbach's alpha value found was 0.75 which indicates an acceptable level of reliability. Parallel form reliability (r=.647) and test-retest radiality (r=.797) values suggest moderate and strong correlation respectively.

In this study the mean HITS scores for the self-identified victims of abuse (n=24) were 14.17, which is similar to the study of Sherin KM et al.[8] where the mean HITS scores for abuse victims were 15.15. In the current study the mean HITS scores for the self-identified male victims of abuse (n=8) were 13.63. Similar findings were reported by Shakil A et al.[9] where the mean HITS scores for the self-identified victims of abuse (n=17) was 14.71. So, the results of this study suggest that the HITS, without any alteration of its content, can be used in Bengali speaking patients regardless of the partner's gender and can successfully differentiate between non clinical and clinical population.

Conclusions

Our study was limited by willingness of the subjects to participate in the study, with a resultant decrease in total number of subjects. Despite the low number of subjects in this study, we were able to replicate the results of the research conducted with male and female subjects. So, Bangla version of the HITS Scale can be an effective tool to study domestic violence in both male and female subjects.

Shoebur Reza Choudhury, Associate Professor, Dept. of Psychiatry, Sir Salimullah Medical College, Dhaka, Bangladesh; **Fahmida Ferdous,** Assistant professor, Dept. of psychiatry, Zainul Haque Sikder Women's Medical College, Dhaka, Bangladesh; **Nayan Ranjan Sarker,** Assistant professor, Dept. of Nephrology Sir Salimullah Medical College, Dhaka, Bangladesh.

Correspondence: Shoebur Reza Choudhury, Associate Professor, Dept. of Psychiatry, Sir Salimullah Medical College, Dhaka, Bangladesh.
Email: drshoebreza@gmail.com

References

1. Phillips J, Vandenbroek P. Department of Parliamentary Services, Canberra. Domestic, family and sexual violence in Australia: an overview of the issues. Available from: https: //www.whiteribbon.org.au/ understand-domestic-violence/what-is-domestic-violence/ domestic-violence-definition /[Accessed 14th December 2019].

2. World Health Organization. Multi-country study on women's health and domestic violence against women. Available from https://www.who.int/ reproductivehealth/topics/violence / mc_ study/en/[Accessed 14th December 2019].

3. World Health Organization. The Multi-country Study on Women's Health and Domestic Violence against Women. Available from: https://www. who.int/gender/violence/who multicountry _study/fact_sheets/Bangladesh2. pdf [Accessed14th December 2019].

4. Choudhury SR, Kabir MS, Ferdous F, Rahman W, Zaman AU. Intimate partner violence among female garments workers in Bangladesh. Sir Salimullah med coll J 2013; 21: 30-3.

5. Seelau EP, Seelau SM, Poorman PB. Gender- and role-based perception of domestic abuse: does sexual orientation matter? Behav Sci Law 2003; 21: 199-214.

6. Gass JD, Stein DJ, Williams DR, Seedat S. Intimate partner violence, health behaviors, and chronic physical illness among South African women. S Afr Med 2010; 100: 582-5.

7. Perez IR, Castano JP. Intimate partner violence and mental health consequences in women attending family practice in Spain. Psychosom Med 2005; 67: 791–7.

8. Sherin KM, Sinacore JM, Li XQ, Zitter RE, Shakil A. HITS: a short domestic violence screening tool for use in a family practice setting. Fam Med 1998; 30(7): 508-12.

9. Shakil A, Donald S, Sinacore J M, Krepcho M. Validation of the HITS Domestic Violence Screening Tool with Males. Fam Med 2005; 37(3): 193-8.

10. World Health Organization. Process of translation and adaptation of instrument. Available from: https://www.who.int/substance_abuse/research _tools/translation/en/ [Accessed 15th December 2019].