

## 論文の内容の要旨

論文題目 Training Sri Lankan public health midwives on intimate partner violence: a pre- and post-intervention study  
(スリランカにおける親密なパートナーによる暴力に関する  
助産師向けトレーニングの前後比較研究)

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### Introduction

Globally, one out of every three women experiences IPV, but rarely discloses their experience of violence till it becomes severe. As a result, sufferers of IPV present to health care institutions with serious IPV-related health consequences such as fractures, severe depression, unsafe abortions or suicidal attempts. Some succumb to the injuries of IPV. If these sufferers can be identified at the community level, health workers can provide them with the necessary assistance during the early stages of violence, and prevent them from developing serious health problems associated with IPV.

To recognize and assist IPV sufferers, health workers need IPV prevention training. This is because untrained health workers can do more harm than good to IPV sufferers. They might blame sufferers for their IPV experiences and aggravate the problem. They might fail to notice warning signs of suicides or homicides, and put women's lives in danger. Furthermore, lack of IPV prevention training might reduce the health workers' perceived responsibility and confidence in managing IPV sufferers.

As a pioneer among developing countries to train community health workers on IPV, in 2009, the Ministry of Health (MOH) of Sri Lanka trained its public health midwives (PHMs) on IPV. PHMs are the most common community health workers in Sri Lanka. MOH expected the PHMs to integrate IPV services into their routine community health services, after the training.

Before introducing the program nationwide, the MOH first piloted it with PHMs in Kandy district, to assess its efficacy in improving PHMs' IPV prevention knowledge and skills. In this study, I evaluate the efficacy of the PHMs' pilot IPV prevention training in improving the PHMs' IPV prevention knowledge, perceived barriers, responsibility, and self-confidence in identifying and managing IPV sufferers in Kandy, Sri Lanka.

### Methods

I conducted this pre-and post-intervention study between August 2009 and September 2010 in the Kandy district. Using a self-administered structured questionnaire, I examined PHMs' ( $n = 408$ ) IPV prevention knowledge, perceived barriers, perceived responsibility, and self-confidence in identifying and managing IPV sufferers. I conducted the pre-intervention surveys just before the commencement of each IPV training program, and conducted the post-intervention surveys six months after each pre-intervention survey.

I assessed PHMs' IPV knowledge using 16 items. For each item, PHMs could respond with a *yes*, *no*, or *don't know*. One mark was given for each correct answer. I assessed PHMs' perceived barriers using seven items and assessed their perceived responsibility using five items. PHMs could indicate their agreement to the items using a five-point Likert scale that ranged from 1 (*strongly disagree*) to 5 (*strongly agree*). I assessed PHMs' self-confidence using eight items. PHMs could indicate their agreement to the items using a three-point Likert scale that ranged from 1 (*not confident*), 2 (*somewhat confident*), and 3 (*very confident*).

Using the Wilcoxon signed-rank test, I compared the pre- and post-intervention scores for the PHMs' IPV knowledge, perceived barriers, responsibility, and self-confidence. I examined the changes in the responses to individual items as well as changes in the summary scores.

To show the individual level improvements in the PHMs' IPV knowledge, perceived barriers, responsibility, and self-confidence after the training, I computed the pre- and post-intervention differences (post-intervention score minus pre-intervention score) for each variable in each participant. I computed the Minimally Important Differences (MIDs) for the four variables and identified the number of PHMs who improved their scores exceeding the MIDs. I computed the Reliable Change Indices (RCIs), and computed the number of PHMs that reliably improved their scores exceeding the RCIs.

Moreover, to assess how the MOH delivered the training to the PHMs, I observed six (out of 11) complete training programs. I observed: (1) whether the trainers adhered to the training manual and delivered the training completely and comprehensively (2) how the PHMs received the training, and (3) whether adequate facilities (venue and equipment) were available for training.

## **Results**

Of all the PHMs included in the study ( $n = 408$ ), 62.5% were above 40 years old, and 85.8% were married. The majority of the PHMs (74.3%) had 12 or more years of formal education prior to their enrollment in midwifery schools. The work duration as PHMs was more than 10 years, 5–10 years, and less than 5 years for 63%, 18.6%, and 18.4% of participants, respectively.

After receiving the IPV training, PHMs' ( $n = 408$ ) median total IPV prevention knowledge score increased significantly from 0.62 to 0.88 ( $p < 0.001$ ). Their median total perceived barrier score decreased significantly from 2.43 to 1.14 ( $p < 0.001$ ). While the median total perceived responsibility score increased significantly from 3.20 to 4.60 ( $p < 0.001$ ), the median total self-confidence score increased from 1.81 to 2.75 ( $p < 0.001$ ).

The MIDs for PHMs' IPV prevention knowledge, perceived barriers, responsibility, and self-confidence were 0.06, 0.36, 0.33, and 0.21 points respectively. Of all, 97.8% of the PHMs ( $n = 399$ ) showed important improvement in their IPV prevention knowledge score exceeding the MID. While 96.6% of the PHMs ( $n = 394$ ) reduced their perceived barriers exceeding the MID, 94.1% ( $n = 384$ ) improved their perceived responsibility, and 98.3% ( $n = 402$ ) improved their self-confidence scores exceeding the MID.

The RCIs for the PHMs' IPV prevention knowledge, perceived barriers, responsibility, and self-confidence scores were 0.25, 0.76, 0.82, and 0.45 respectively. Of all, 80.1% of the PHMs ( $n = 327$ ) reduced

their perceived barriers exceeding the RCI. While 64.5% of the PHMs ( $n = 263$ ) improved their perceived responsibility exceeding the RCI, 93.6% ( $n = 382$ ) improved their self-confidence score reliably. However, only 42.4% of the PHMs ( $n = 173$ ) showed a reliable improvement in their IPV prevention knowledge score exceeding the RCI.

The correlations in the pre- and post-intervention scores of PHMs' IPV prevention knowledge, perceived barriers, perceived responsibility, and self-confidence scores were 0.25, 0.36, 0.54, and 0.57 points respectively; PHMs showed 75%, 64%, 46%, and 43% RTM in their IPV prevention knowledge, perceived barriers, perceived responsibility, and self-confidence scores respectively.

My observations confirmed that the trainers conducted the training completely and comprehensively, in adherence to the training manual. They used participatory learning techniques to improve PHMs' practical IPV prevention skills. PHMs actively participated in the discussions, and provided positive feedback such as "the training is interesting" and "training is very relevant to my work". However, the MOH included only the community physicians as the trainers, and did not include trainers from other disciplines, such as lawyers, police officers, etc. Furthermore, the PHMs were not provided with guidelines or protocols which they could use for their IPV services.

## **Discussion**

The Sri Lankan IPV prevention training for public health midwives was associated with significant improvements in the midwives' total scores in perceived responsibility, barrier reduction, and self-confidence in managing IPV sufferers ( $p < 0.001$ ). At the individual level, 64.5% of the PHMs showed reliable improvement in their perceived responsibility, 80.1% showed reliable improvement in barrier reduction, and 93.6% showed improved self-confidence scores above the RCI. Although the PHMs' total IPV knowledge improved significantly from the baseline ( $p < 0.001$ ), at the individual level, only 42.4% of the PHMs showed reliable improvements in their IPV knowledge after the training.

These findings are similar to the findings of the previous IPV/DV prevention trainings. None of the previous training programs showed improvements across all domains (the health workers' IPV knowledge, responsibility, self-confidence, barriers, etc.). For example, a 2005 US Continuing Medical Education program improved health workers' ( $n = 284$ ) knowledge, attitudes, empathy, and self-reported assessment behaviors about DV, but did not improve their perceived responsibility to counsel DV sufferers. In 2010, a two-day intensive IPV prevention training program for Greek general practitioners improved the participants' perceived preparedness and knowledge about IPV, but did not improve their skills in identifying IPV sufferers. Sri Lanka's IPV prevention training was associated with improvements in PHMs' perceived responsibility, barrier reduction, and self-confidence in identifying and managing IPV sufferers, but not in their IPV prevention knowledge.

Comprehensive training and the use of participatory learning techniques could have contributed to the observed improvements in the midwives' perceived responsibility, barrier reduction, and self-confidence. As PHMs are community health workers, that too may have improved the program's outcome; PHMs work in the

field and have more time with sufferers, making it easier for them to inquire about IPV. Because the training did not provide sufferer management protocols to midwives, and did not include non-medical professionals as trainers (eg. lawyers and police officers), it could have contributed to the inadequate improvements seen in midwives' violence prevention knowledge.

A limitation of this study was that I did not include a control group to compare with the intervention group. I could have drawn a control group from an adjacent district, however, it could have led to information contamination and produced inaccurate results. This is because Kandy PHMs could meet the PHMs in the adjacent districts and share their new IPV prevention knowledge.

This study has several strengths as well. First, most previous studies on this topic used small sample sizes. In this study, I included all the PHMs in Kandy district to increase the sample size. Second, in this study, the dropout rate was minimal because I avoided postal surveys and used PHMs' monthly meetings to conduct the post-intervention surveys. Third, this study evaluated a well-structured and a properly conducted IPV training program in a developing country. This improved the quality of data reported in this study.

### **Conclusions**

the Sri Lankan midwives' pilot intimate partner violence training was associated with improvements in the midwives' perceived responsibility, barrier reduction, and self-confidence in managing partner violence sufferers, among some of the midwives. Midwives partner violence prevention knowledge did not improve in a similar manner. Comprehensive training and participatory learning techniques could have contributed to the observed improvements in the midwives' perceived responsibility, barrier reduction, and self-confidence. Not providing sufferer management protocols to PHMs and not including a diverse trainer group may have contributed to the inadequate improvements in midwives' violence prevention knowledge.

The Ministry of Health should address these limitations and bring improvements in IPV prevention training. Independent evaluators may assess the improved training for its efficacy. Future research should also assess the long-term efficacy of partner violence prevention training in improving midwives' partner violence prevention skills. After addressing its limitations, the Ministry of Health may use the training and continue to train its midwives on partner violence prevention.

To the best of my knowledge, this is one of the few studies that evaluated the efficacy of an IPV training in a developing country. The results of this study will be useful for the Sri Lankan MOH in training PHMs on IPV prevention. Other developing countries might learn lessons from this training and provide IPV prevention training to their community health workers.