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Comparing the effect of group-based and compact disk-based training on midwives' knowledge and attitude toward domestic violence in women of reproductive age

Masoomeh Vakily, Mahnaz Noroozi¹, Nikoo Yamani²

Abstract:

BACKGROUND: Training the health personnel about domestic violence would cause them to investigate and evaluate this issue more than before. Considering the new educational approaches for transferring knowledge, the goal of this research was to compare the effect of group-based and compact disk (CD)-based training on midwives' knowledge and attitude toward domestic violence.

METHODS: In this clinical experiment, seventy midwives working at health centers and hospitals of Isfahan were randomly allocated into two classes of group-based and CD-based trainings and were trained in the fields of recognition, prevention, and management of domestic violence. Data were collected by questionnaires which were completed by the midwives for evaluation of their knowledge and attitude.

RESULTS: The mean score of midwives' knowledge and attitude toward domestic violence had a meaningful increase after the training (16.1, 46.9) compared to the score of before the training (12.1, 39.1) in both of the classes (group-based training: 17.7, 45.4) (CD-based training: 11.7, 38.6). No meaningful difference was observed between the two groups regarding midwives' attitude toward domestic violence after the intervention; however, regarding their knowledge level, the difference was statistically meaningful ($P = 0.001$), and this knowledge increase was more in the CD-based training group.

CONCLUSIONS: In spite of the effectiveness of both of the training methods in promoting midwives' knowledge and attitude about domestic violence, training with CD was more effective in increasing their knowledge; as a result, considering the benefits of CD-based training such as cost-effectiveness and possibility of use at any time, it is advised to be used in training programs for the health personnel.

Keywords:

Attitude, compact disk-based training, domestic violence, group-based training, knowledge, midwife, women

Introduction

Violence is considered to be one of the most important and fundamental problems announced by the World Health Organization, which has threatened society's health. Violence against women includes any aggressive gender-based action that may

lead to physical, mental, and sexual damages or forced deprivation of personal and social freedom for women.^[1] Domestic violence is the most prevalent type of aggression against women.^[2] The global prevalence of domestic violence differs from 15% in Japan to 71% in Ethiopia.^[3] Various figures are available in Iran, concerning domestic violence. In a study in Tehran, mental

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Student Research Center, School of Nursing and Midwifery, Isfahan University of Medical Sciences, ¹Department of Midwifery and Reproductive Health, School of Nursing and Midwifery, Isfahan University of Medical Sciences, ²Department of Medical Education, Medical Education Research Center, Isfahan University of Medical Sciences, Isfahan, Iran

Address for correspondence:

Dr. Mahnaz Noroozi, Department of Midwifery and Reproductive Health, School of Nursing and Midwifery, Isfahan University of Medical Sciences, Isfahan, Iran.
E-mail: noroozi@nm.mui.ac.ir

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misconduct was reported as 87%, physical misconduct as 25%, and sexual misconduct as 39%.^[4] Violence might have direct, indirect, short-, medium-, or long-term consequences and encompasses physical injuries, mental illness, and even death.^[5] Adverse effects of violence against women include lack of self-esteem, negative attitude toward society, suicide, substance abuse, persistent depression, and posttraumatic stress disorder.^[6] The personnel of health and treatment centers, especially midwives, are the ones who will encounter violated women. According to conducted studies in Iran, lack of awareness and sufficient training of the staff of health and treatment centers for confronting domestic violence is considered to be the main weak point of the health system.^[7] It seems that health staff's access to important data regarding domestic violence management, evaluation of the existing conditions, relevant procedures, and optimizing their awareness and attitudes in this respect will reinforce their sensitivity so that they will examine and evaluate domestic violence in a better way.^[8] In other words, enabling the personnel of health and treatment centers to screen, diagnose, and manage domestic violence against women will be an important step toward preventing or minimizing such incidences.^[9] Training methods are different and would be applied based on people's needs and training contents. Group training is one of these methods that would provide face-to-face training and a question and answer atmosphere. However, some factors such as having a busy life, being tired from the work shift, and shortage in the substitute workforce for training the personnel of health and treatment centers could challenge the success of the above-mentioned method. Nowadays, and gradually, traditional and old training methods have lost their efficiency as the result of new technologies. Therefore, we have to look for new techniques to transfer knowledge and optimize learning.^[10] Training by means of compact disk (CD) is another training method that is fulfilled through transferring the concepts in an easier, wider, and more attractive way using texts, sounds, images, and videos.^[11] Therefore, for better and more identification, distinguishing, and management of domestic violence by the health staff, the present study was conducted to compare the influence of training on midwives' awareness and attitude toward domestic violence among women of fertility age using group and CD training methods.

Methods

The present study was a clinical trial (IRCT 2016022426756N1) that was performed using two methods of group and CD training. Research environment for the present study consisted of selected health and treatment centers of Isfahan (both private and governmental). The sample size for both groups was calculated to be

a total of seventy persons (with the accuracy of 0.7 and confidence interval of 95%). The inclusion criteria were having bachelor's or master's degree in Midwifery, exclusive employment in health and treatment centers to provide services for women of fertility ages, willingness to participate in the study, and not having received any training courses regarding domestic violence in the past. The exclusion criteria were not participating in any of the training sessions for the group-based training method, not studying or insufficiently studying the training CD for the CD training method, unwillingness to continue the cooperation during the study, and receiving information regarding domestic violence from other resources during the study period.

After receiving permission from the Ethics Committee of the Research Deputy of Isfahan University of Medical Science (Ratification Code 394658), health and treatment centers were selected through quota sampling method. In Isfahan, 146 midwives are working at health centers and 425 midwives are employed at treatment centers. To select seventy required people as the samples, 18 were selected from the health centers and 52 were chosen from the treatment centers. In this respect, selected health and treatment centers (totally 32 centers) were chosen from active centers of Isfahan with suitable referral number by women of fertility ages. After finalizing the selection of the centers, midwives were chosen through simple sampling based on the inclusion criteria. Afterward, samples were divided into two groups of group training and CD training using random allocation method; meaning that two separate lists were recorded for the health and treatment centers after assigning codes to the participants. Then, midwives were randomly allocated to the Group Training (with code "A") and CD Training (with code "B").

Data collecting tool was a questionnaire that was completed by the studied groups at two stages (before the intervention and 2 months after the intervention).

The aforesaid questionnaire contained three sections: demographic characteristics, awareness measurement, and attitude measurement. Awareness measurement tool consisted of 24 multiple choice questions and the score of one was assigned to each correct answer. Minimum and maximum scores were 0 and 20, respectively. Attitude measurement tool had 15 questions with 5-point Likert scale (totally agreed, agreed, I have no idea, disagreed, totally disagreed). The assigned scores for measuring negative attitude were: 0 for totally agreed, 1 for agreed, 2 for I have no idea, 3 for disagreed, and 4 for totally disagreed. Furthermore, the assigned scores for measuring positive attitude were: 4 for totally agreed, 3 for agreed, 2 for I have no idea, 1 for disagreed, and 0 for totally disagreed.

Content validity method was used to approve the scientific validity of the data collection tools and test-retest method was applied for its reliability.

After taking informed consent form for taking part in the present study and conducting the preexamination, by prior arrangement, the researcher performed the training using different training methods (speech, sharing the members' experiences, and question and answer) and board and computer in two sessions each lasting for 2 h in 1 day from 8:00 to 12:00 at Nursing and Midwifery Faculty.

After the second group training session, the researcher distributed a CD among midwives of the CD group about domestic violence (contents were similar to those provided at group training). This CD consisted of the training text, case reports, questions, images, and videos. Training content included the importance and necessity of domestic violence, its prevalence in Iran and the world, ideas of Islam, influential factors and domestic violence theories, signs and consequences of violence among women, screening, prevention and treatment of domestic violence, introduction to social emergency, and midwife's role in confronting violated people. Valid scientific books, articles, and websites were applied for preparation of the training contents.^[12-15] Afterward, the researcher carried out the posttest stage after 2 months. Descriptive and inferential statistics method (*t*-test, paired *t*-test, and Chi-square test) were used for data analysis along with SPSS 19 Software (IBM Company, Armonk, NY, U.S.A).

Results

Results of independent *t*-test and Chi-square test indicated that no meaningful difference existed between two groups concerning their mean of age, working experience, marital status, educational level, and place of work.

The mean score of midwives' awareness and attitude toward domestic violence before the training

(intervention) had no meaningful difference between the group training and the CD training classes [Table 1].

Results of *t*-test indicated that the mean score of awareness of the group training class was significantly increased after the training compared to its score before the training ($P < 0.001$). In addition, the mean score of awareness of the CD training class was also increased after the training compared to its score before the training ($P < 0.001$). Regarding midwives' attitude toward domestic violence, our findings indicated that the mean score of awareness of the group training class was significantly increased after the training in comparison to before the training ($P < 0.001$). The same was happened for the CD training class ($P < 0.001$) [Table 1].

Results of *t*-test showed that midwives' mean score of awareness regarding domestic violence in both of the above-mentioned groups had a meaningful statistical difference after the intervention ($P = 0.001$), while no meaningful difference was observed between these two groups after the intervention ($P = 0.26$) [Table 1].

Discussion

The present study was conducted to compare the influence of training on midwives' awareness and attitude toward domestic violence using two group training and CD training methods. According to the results, the mean scores of awareness and attitude were increased after the intervention in both groups in comparison to before the intervention. In a study by Jayatileke *et al.* in Sri Lanka, an increase was seen in awareness score after group training.^[11] Papadakaki *et al.* in their study that was conducted in Greece also reached the conclusion that students' and physicians' knowledge and understanding after group training were increased.^[16] Another finding of the present study was more increase in midwives' awareness score about domestic violence in the CD training class in comparison to the group training class after the intervention. The results by Khorami Rad *et al.* in Qom indicated that training through CDs in comparison to books has

Table 1: Comparison of the mean scores of midwives' awareness and attitude toward domestic violence before and after the intervention in group training and compact disk training classes

Class	Examination time											
	Awareness score				Relevant paired <i>t</i> -test and <i>P</i>		Attitude score				Relevant paired <i>t</i> -test and <i>P</i>	
	Before the intervention		After the intervention				Before the intervention		After the intervention			
	Mean	SD	Mean	SD	<i>t</i>	<i>P</i>	Mean	SD	Mean	SD	<i>t</i>	<i>P</i>
Group training	12.1	2.3	16.1	1.9	11.6	<0.001	39.1	5.3	46.9	4.9	15.8	<0.001
Training with CD	11.7	2.6	17.7	1.1	14.7	<0.001	38.6	5.8	45.4	6.4	13.5	<0.001
Independent <i>t</i> -test												
<i>t</i>		0.8		4.3				0.4		1.1		
<i>P</i>		0.4		<0.001				0.7		0.3		

CD = Compact disk, SD = Standard deviation

optimized general physicians' awareness about reporting the diseases.^[10]

Hugenholtz *et al.* also reached a significant increase in participants' knowledge and awareness using electronic training methods in comparison to speech-based methods;^[17] while the study of Khodadadi *et al.* showed that both of the group training and CD training methods have been equally influential in optimizing nurses' awareness about taking care of pacemaker.^[9]

In the present study, it seems that, the more influence of the CD training than the group training method on the awareness level might be due to the ease of access to the training contents of CDs for several times and at any time, which has provided midwives with more time to review the contents than the group training method. Likewise, results of the present study indicated that midwives' mean score of attitude toward domestic violence in both of the group training and CD training methods had no meaningful difference after the intervention.

In a review study by George *et al.* on comparison of electronic training and group training methods for health training, no meaningful statistical difference was seen between both of the training methods in any of the 12 cases regarding the attitude score.^[18]

It seems that similar influence of group training and CD training methods on midwives' attitude alteration toward domestic violence might be due to the suitable contents of the CDs and their variation and attraction in spite of their similarity to the contents of group training class and lack of face-to-face training.

Conclusions

Considering the importance of personnel's training and its role in optimizing patients' care, lack of sufficient specialized team for training, treatment staff limitations, being busy, lack of substitute workforce, and financial and time limitations to perform group training programs and also the specifications of CD training such as learning based on learner's interest and needs, cost-effectiveness, self-learning, efficiency, accessibility, possibility of training for several times, flexibility, being learner-oriented, training without any time limitations and tirelessness, wide range of training, and training through CD are recommended to the health and treatment personnel as a suitable training method.

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Conflicts of interest

There are no conflicts of interest.

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