RESEARCH ARTICLE

The Role of Health Volunteers in Training Women Regarding Coping Strategies Using Self-Efficacy Theory: Barriers and Challenges Faced by Health Volunteers in Empowerment of Women

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Abstract

Introduction: Psychological distress is among physical and mental health threats, and health volunteers can play a critical role in empowerment of women. However, evidence has revealed a decline in health volunteers’ activities. Therefore, the present study aimed to investigate the challenges faced by health volunteers in empowerment of women.

Methods: The participants’ knowledge level was assessed using a written test. Their perceived skills were also measured using Coping Inventory for Stressful Situations by Endler and Parker and Chesney’s Coping Self-efficacy Scale, respectively. The study data were entered into the SPSS statistical software, version 11.5 and were analyzed using chi-square, sample t-test, and Pearson’s correlation coefficient.

Results: The results showed a considerable increase in the intervention group health volunteers’ knowledge about stress, as well as their self-efficacy. Besides, a significant correlation was observed between self-efficacy and task-oriented strategy scores. However, no significant increase was found in this group’s coping strategies. The results also indicated a significant increase in the intervention group women’s knowledge about stress, but no significant change was observed in other constructs. Some challenging factors, such as managerial, personal, and interpersonal factors, were also detected that might have affected the results.

Discussion: This study caused no considerable change in coping with stress, except for increasing the women’s knowledge in this regard. Considering the challenges identified in this study, programs should be developed for researchers and health center managers to improve this condition in future.

Keywords: Challenges- coping strategies- health volunteers- self-efficacy- training- women

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Introduction

Psychological distress is among physical and mental health threats that cannot be avoided in everyday life (Bennett and Wells, 2010; Bounds, 2006). Based on stress definition by Kohen et al., when imposed environmental demands (internal or external, real or unreal) are more than an individual’s adaptation capacity, they cause biological and mental changes that might expose one to diseases accompanied by physiological, behavioral, and mental signs and symptoms, such as palpitation, anger, and insomnia (Latendresse 2009; Field, 2013). Up to now, many studies have been conducted on the effects of stress on physical and mental health, motivation, improvement, etc., which indicates the importance of this issue. Continuous exposure of individuals to stress might have maladaptive effects on their health, including progress of cardiovascular disorders (Admon et al., 2013; Roos et al., 2009).

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On the other hand, ineffective coping strategies increase the negative consequences of stress (Maercker, 2013; Myers et al., 2013). Task-oriented strategies include active problem-solving methods used for solving the stressor relationship between an individual and one’s environment. Besides, emotion-oriented strategies consist of methods based on which, individuals reach an optimum level of emotional adjustment as well as the capability to face critical situations and emotions. Finally, avoidance strategies refer to attempt for avoiding a situation (Maercker, 2013).

Incidence of stressful events in life together with inability to solve problems result in ineffective coping strategies that not only do not solve the previous problems, but also create new ones (Karekla et al., 2011). The effectiveness of coping strategies training was confirmed in the studies performed by Karekla (2011) and Folkman (1984). Hence, training can nurture appropriate coping strategies. Evidence has also demonstrated that training programs, by providing the required knowledge and awareness for performing tasks, play a key role in empowerment of individuals. Health education also has a main role in changing behaviors, preventing diseases, and helping individuals reach an appropriate health status. In this regard, researches have revealed that model-based educational interventions have a higher chance of success. Thus, in educational interventions, one of the most important measures is selection of a theory based on conditions, identification of the problems, compatibility of the model’s efficiency and goal, and compatibility of the theory to the educational program’s goals (Becker, 1974).

Since 1990, many educational programs have been developed based on focus on increasing individuals’ perception of self-efficacy in order to encourage them towards participation in and improvement of health behaviors. In general, a large number of factors, including previous successes and failures, others’ messages, and others’ successes and failures, are effective in self-efficacy (Strecher, 1986).

Public organized forces, including health volunteers, are important social resources whose planned participation in health improvement programs has been emphasized by experts of the health field. Health volunteers can play a key role in empowerment of the society, particularly women, because of continuous relationships with families and their cultural, economic, and social closeness. It should be noted that women’s participation is necessary for improvement of women’s health, their families’ health, and development of human rights and social justice (WHO, 2005).

Pandve (2013) stated that there were challenges against health volunteers’ activities. Therefore, the present study aims to assess whether performance of quasi-experimental studies based on self-efficacy theory is effective in health volunteers’ role in training women regarding coping strategies.

In the end, this research will predicate lack of methodological information and original researches on women’s empowerment and coping strategies and necessity to carry out new studies using the existing capacities in the society and scientific theories.

### Materials and Methods

#### Methods

This controlled, quasi-experimental study with pre/posttest design aimed to investigate the effect of educational intervention on knowledge of stress, coping strategies, and self-efficacy in facing problems among health volunteers and women under their coverage in health centers of Shiraz, Iran. In spite of performing a vast search, no similar studies were found to be used for estimation of sample size. Therefore, a pilot study was carried out. The study sample included 60 health volunteers and 600 women (10 women under each volunteer’s coverage). Considering the probability of loss, 68 volunteers and 680 women were enrolled into the research. At the beginning of the study, due to exclusion of some volunteers in the intervention group, another health center including 14 health volunteers and 140 women was selected. On the other hand, the loss rate was lower and the sample size was acceptable in the control group. After all, 82 health volunteers and 820 women entered into the study.

At first, two areas (Valfajr and Enqelab) were selected using purposive sampling. After that, two health centers in each area were allocated to intervention and control groups through simple random sampling. Due to system’s deficiency in providing the volunteers with the women’s records, the women were selected from the lists provided by the health volunteers. The informed consent was obtained in the form of a written form of the target population.

The study data were collected using the following instruments: Coping Inventory for Stressful Situations by Endler and Parker

This questionnaire contains three task-oriented, emotion-oriented, and avoidance-oriented scales. Assessment of the questionnaire’s reliability using test-retest method showed coefficients of 83%, 85%, 83%, and 55% for the whole questionnaire and task-oriented, avoidance-oriented, and emotion-oriented scales, respectively. Considering the questionnaire’s internal consistency also, Cronbach’s alpha coefficients of 83%, 86%, 81%, and 79% were obtained for the whole instrument and task-oriented, emotion-oriented, and avoidance-oriented scales, respectively (Cosway et al., 2000).

Chesney’s Coping Self-Efficacy Scale

This is a 26-item scale whose Cronbach’s alpha has been reported to be 384 in two original researches. Accordingly, coefficients of 0.91, 0.91, and 0.80 were obtained for coping strategies, avoiding negative thoughts and emotions, and getting support from friends and family, respectively. Besides, using test-retest method in a 3-month period, the reliability coefficient was computed as 0.82, 0.80, and 0.80 for coping strategies, avoiding negative thoughts and emotions, and getting support from friends and family, respectively (Chesney et al., 2006).
A researcher-made questionnaire for evaluation of health volunteers’ and women’s knowledge about stress and coping strategies

Using some reliable educational texts, educational content appropriated to the participants’ level was extracted and a test including objective questions was designed accordingly. Based on a pilot study and experts’ opinions, Cronbach’s alpha coefficient of the questionnaire was computed as 64%, which confirmed its reliability.

The educational intervention was conducted for the intervention group health volunteers through an educational workshop held in three 3-hour sessions. The intervention included question and answer and providing opportunities for discussion and feedback. The educational content consisted of stress-related issues and educational booklets and pamphlets given to the intervention group health volunteers and the women under their coverage. The intervention group health volunteers were required to transfer the educational content to the women under their coverage through face-to-face training. Pretest was performed before the intervention, while posttest was conducted after 7 days for the volunteers and after 1 month for the women.

After collecting, controlling, and coding the data, they were entered into the SPSS statistical software, version 11.5 and were analyzed using chi-square, sample t-test, and Pearson’s correlation coefficient.

Results

The frequency of the intervention group women was higher compared to other study groups, and the frequency of the health volunteers was lower compared to the women. Besides, the mean age of the health volunteers was higher than that of the women in both intervention and control groups. In all the study groups, the percentage of married participants was higher compared to single ones. Considering education level also, most of the participants had above diploma degrees. After confirmation of normal distribution of the study data using Kolmogorov-Smirnov test and drawing histogram, t-test was used to compare the means of the study areas before and after the intervention. The results showed a considerable increase in the means of the study areas before and after the intervention.

As Table 1 depicts, the intervention group women’s knowledge of stress and self-efficacy (p<0.001) (Tables 1 and 2). However, no considerable increase was found in coping strategies in this group (p>0.05).

Pearson’s correlation coefficient was used to assess the relationship between the scores of self-efficacy and coping strategy areas before and after the intervention. The results indicated a significant relationship between self-efficacy and task-oriented strategy scores after the intervention (p=0.05) (Table 3). However, no considerable increase was observed in other constructs, including coping strategies and self-efficacy, in this group (p>0.05).

As Table 1 depicts, the intervention group women’s knowledge of stress significantly increased after the intervention (p<0.001), but no significant change was observed in other constructs, including coping strategies and self-efficacy, in this group (p>0.05).

Discussion

The study findings indicated a significant increase in the intervention group health volunteers’ knowledge about stress after the intervention. This is consistent with the results obtained by Cox et al., (2013) and Stanley et al., (2013). The results also indicated a significant increase in the intervention group volunteers’ self-efficacy after the intervention. This is in agreement with the results of the studies performed by Stanley et al., (2013) and Bilgin et al., (2015). Additionally, a significant increase was observed in the score of self-efficacy based on task-oriented strategy after the intervention. This is in line with the results of the researches carried out by Tang et al., (2015) and Barkokis et al., (2010). The present

### Table 1. Comparison of the Mean Scores of Knowledge in the Study Groups before and after the Intervention

| Area                     | Mean (SD) Before the intervention | Mean (SD) After the intervention | Statistic | p-value |
|--------------------------|----------------------------------|----------------------------------|-----------|---------|
| Health volunteers        | 7.90 (2.80)                      | 15.59 (3.46)                    | 10.78     | 0.001   |
| (intervention)           |                                  |                                  |           |         |
| Health volunteers        | 8.31 (2.88)                      | 8.27 (3.79)                     | 0.05      | 0.95    |
| (control)                |                                  |                                  |           |         |
| Women (intervention)     | 8.32 (4.34)                      | 12.21 (5.30)                    | 9         | 0.05    |
| Women (control)          | 7.19 (3.00)                      | 7.01 (2.93)                     | 0.57      | 0.57    |

### Table 2. Comparison of the Mean Scores of Self-Efficacy in the Study Groups before and after the Intervention

| Area                     | Mean (SD) Before the intervention | Mean (SD) After the intervention | Statistic | p-value |
|--------------------------|----------------------------------|----------------------------------|-----------|---------|
| Health volunteers        | 187.80 (39.36)                   | 201.44 (36.35)                   | 2.34      | 0.024   |
| (intervention)           |                                  |                                  |           |         |
| Health volunteers        | 180.04 (32.37)                   | 174.38 (36.23)                   | 0.72      | 0.47    |
| (control)                |                                  |                                  |           |         |
| Women (intervention)     | 161.95 (45.42)                   | 168.52 (37.90)                   | 1.81      | 0.07    |
| Women (control)          | 160.28 (40.79)                   | 159.20 (44.17)                   | 0.21      | 0.82    |

### Table 3. The Correlation between Self-Efficacy and Various Areas of Coping with Stress in the Study Groups

| Coping strategies | Task-oriented strategy | Emotion-oriented strategy | Avoidance-oriented strategy | Total score |
|-------------------|------------------------|--------------------------|----------------------------|-------------|
| Study groups      |                        |                          |                            |             |
| Health volunteers |                        |                          |                            |             |
| (intervention)    | r=0.330                | r=0.097                  | r=0.162                    | r=0.022     |
| (control)         | p=0.035                | p=0.157                  | p=0.312                    | p=0.893     |
| Women (Intervention) | r=0.068                | r=0.010                  | r=0.258                    | r=0.037     |
| (control)         | p=0.765                | p=0.640                  | p=0.223                    | p=0.870     |
| Women (control)   | r=0.062                | r=0.002                  | r=0.046                    | r=0.074     |
|                   | p=0.422                | p=0.977                  | p=0.534                    | p=0.337     |

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study findings also showed a significant increase in the intervention group women’s knowledge of stress after the intervention, which is consistent with the results reported by Limm et al., (2010), and Brinkborg et al., (2011).

However, no considerable increase was detected in the intervention group volunteers’ coping strategies after the intervention. Improvement of coping strategies requires longer educational periods involving more participants, particularly volunteers, explanation of issues, and elimination of ambiguities. Therefore, future studies are recommended to devote more time to training these issues. These results are corresponding to those obtained by Tang et al., (2015), Karekla et al., (2011).

Women’s health is the base of health of half of the population, family, and society. In comparison to men, women suffer from acute and chronic conditions and long- and short-term disabilities more. Meanwhile, self-efficacy is among the factors leading to improvement of women’s general health. In this respect, learning new skills that strongly affect self-efficacy is essential for improving women’s self-efficacy (Wu et al., 2004; Long, 1989). After the intervention in our study, no significant change occurred in the study constructs, including coping strategies and self-efficacy, among women.

In the current study, the researchers came to some barriers and challenges against the health volunteers’ role play, including limitations of urban life, limited relationship with households, and husbands’ lack of permission, housing, and lack of persuaders.

Sreed et al., (2010) conducted a study in Kerala, India and reported that volunteers’ and individuals’ unpreparedness for taking part in the study resulted from high ages, husbands working in factories, inability to complete the study, lack of training, lack of budget, and time restrictions. In the study by Moore et al., (2013), stated meaningful volunteer roles, recruiting a sufficient Number of volunteers, and recruiting volunteers with particular skill sets were reported as the three top challenges. Similarly, Rogers (2013) reported that the volunteer recruitment and retention, administrative issues, and operational difficulties brought about by the current economic crisis.

Generally, performance of tasks depends on their outcomes. In fact, an individual pays attention to a task’s outcome or reward before performing it. Since these rewards are controlled by the organization, they should be regarded as an important factor affecting staff’s behavior. Through evaluation, managers can figure out individuals’ skill deficiencies and type of programs that should be executed. In this way, they can also identify individuals’ skills and qualifications and conduct appropriate programs for solving the problems (Rabbins, 1999). Lack of documents regarding execution, evaluation, and feedback by local authorities shows system’s deficiency, which in turn has negative effects on volunteers’ performance and cooperation.

At first, each occupation’s goals have to be determined and directed towards the organization’s goals. These goals affect individuals’ efficiency and goal setting skills. Besides, identification of accurate goals result in the best performances (Rabbins, 1999).

According to the findings of the current study, it seems that goal setting is not clearly done in the health system. Researchers conducted on health volunteers out of Iran also demonstrated challenges in their program as well as the necessity to pay more attention to this area. For instance, Nelson et al., (2004) carried out a study on volunteers’ disappointment and quitting the program in the U.S. and referred to factors associated with the program (supervision, education, and policies), power (volunteers’ status and legal authorities), and difficulties (facilities, housing, low encouragement, and distance from the main place). Another study in the U.S. also revealed a tension between most of the volunteers’ tendency towards the program and their commitment to the manager and supporting them for gaining high-quality outcomes. Additionally, more than half of the organizations were not willing to employ volunteers. Moreover, program managers stated that health volunteers were mostly trained in groups, while face-to-face education is the best training method (Iglitzin and Jackson, 2003). In the same line, Lynch and Smith (2008) performed a research in Britain and came to the conclusion that the importance of employment, effective selection, and management of volunteers was often neglected. In addition, managers of smaller organizations underwent no training for selection of volunteers and tended to spend less time and experience for human resources. Furthermore, the results of the study by Liu et al., (2011) indicated that due to differences in execution of health volunteers’ programs, evaluation of these programs based on standards used in other health interventions was difficult. Additionally, although studies have accurately shown the impact of these programs on health outcomes, these results could not be attributed to a particular aspect of a program. Besides, there were only few systematic documents on management of health volunteers’ programs and the relationship between management and quality of the program.

The findings of the research by Slaughter and Home (2004) on volunteers’ long-term motivations revealed that individuals felt more pressure on their time compared to the past. Thus, volunteers might be more willing to do limited activities and, consequently, motivation must be continuously created in health volunteers. One other study in Australia (Investing In Australia’s Health, 2003) also showed that individuals disrupted their voluntary activities due to high commitment, change in personal conditions, and frustration because of lack of valuable activities, support, and training. Based on the results of the aforementioned studies, health volunteers are faced with managerial, personal, familial, and social problems. Hence, lack of change in the current study results might be related to the above-mentioned barriers and challenges rather than perception of the health volunteers and the women under their coverage.

In conclusion, the present study findings revealed no considerable change, except for increase in the women’s knowledge of stress. Considering the importance of health volunteers and women in the society and the role of mental health in this regard, educational interventions can be effective in women’s knowledge level. By increasing the training time and continuing such programs using
communication channels and audience-friendly training methods, these trainings can finally lead to creation and improvement of skills. Of course, taking managerial policies and strategies is essential for increasing the effectiveness of the programs.

Limitations
Considering short-term outcomes, evaluation of outcomes in the long run, including learning survival, caused a limitation to this study. Another limitation of our study was loss of sample size.

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