

Research Paper**Effect of Family-Based Empowerment Model on the Self-Efficacy of Hypertensive Elderly People*****Batool Hedayati¹**

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ABSTRACT**Objectives** Non-communicable diseases are important factors of mortality and morbidity in the elderly people. Among them, hypertension is the most common cardiovascular disease. The family-centered empowerment model is considered to be an important model for promoting health. Thus, the aim of this study was to evaluate the effect of the model on self-efficacy in elderly people with hypertension.**Methods & Materials** This clinical trial study was conducted on 62 elderly people with hypertension in the Lenjan health center. After sampling by randomized clustering, the subjects were assigned to experimental and control groups. The family-centered empowerment model was used in the experimental group while the control group had one educational class. The research tools were demographic check list and dimension of self-efficacy of empowerment questionnaire. Post-test was carried out 1 week after the intervention and was followed up after 1.5 months. The obtained data were analyzed by means of SPSS20 Software and Dedicational Statistical Tests, Mann-Whitney, Chi-Square, T-Test, and ANOVAS.**Results** Before the intervention, both groups were matched with respect to the means of self-efficacy dimension score ($P>0.05$); but 1 week and 1.5 months after the intervention, significant differences were observed in experimental group ($P<0.05$).**Conclusion** In this study, the family-centered empowerment model showed an effect on the self-efficacy of elderly people with hypertension.**Key words:**Empowerment,
Family-centered,
Self-efficacy, Elderly,
Hypertension**Extended Abstract****1. Objective****A**

ging population is a phenomenon that has been observed since the twentieth century [1]. This age group mainly suffers from non-communicable diseases, including high blood pressure, and,

hence, is considered as one of the main consumers of health services [2]. It has been reported that the promotion of self-efficacy is effective in preventing, reducing, and controlling diseases [5]. Health promotion indicates that the family role is central in the process of preventing and treating diseases [11]. Methods to help individuals and their families to have an active role in their health care must emphasize on empowering them [14]. Family-centered empowerment model

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is designed to improve the effectiveness of the role of the individual and family members and is aimed at empowering the patients in their illness [16]. The current study has been conducted with the aim of determining the effect of family-centered empowerment model on the self-efficacy of hypertensive elderly individuals.

2. Methods and Materials

This randomized clinical trial study was conducted with two-group and three-stage designs and with pre-test and post-test on 62 hypertensive elderly people. After receiving the letter of introduction from the Vice-Chancellor for Research of Isfahan Nursing and Midwifery Faculty and written permission (with the code of 392189), the researcher referred to the Langan Healthcare Network. Using cluster sampling, the samples were divided into two groups of experimental and control. The inclusion criteria were 60 years and older, having a high blood pressure of above 140/90 as approved and registered by the doctor of a health center, having a health record at the center, willingness to participate in the research, completion of Empowerment Dimension Inventory, and obtaining a score of a medium or weak in the scale.

Exclusion criteria included the unwillingness of the elderly to continue cooperation in the empowerment plan, unwillingness to complete the research tools, and not attending meetings more than once. For the experimental group, the family-centered empowerment model was based on the pattern of steps. The first step was the increase in threat understanding through group discussions. The second step was self-efficacy through group discussion and practical presentation. The third step was promoting self-esteem through the transfer of learned material by the elderly to a family member. The fourth step was evaluation involving process evaluation and the final evaluation. Empow-

erment was performed in the form of questions and answers during the intervention sessions and as group discussions in the final stage. Common care and a training session were conducted for the control group. Research instruments were Demographic Information Checklist, the Empowerment Questionnaire, and Measurement of Self-efficacy Dimension. The post-test evaluation was conducted a week later, and it was followed-up a month and a half later. Independent t-test, analysis of variance, and SPSS20 software were used for data analysis.

3. Results

The results of this study showed that there was no significant difference between the two groups in the mean scores of self-efficacy feeling before the intervention ($P < 0.05$). This was expected due to the random allocation of samples and no interventions. But within a week and a month and a half after the intervention, there was a significant difference between the two groups ($P < 0.001$), and the elderly self-esteem increased (Table 1). This may be because promoting knowledge and awareness on high blood pressure and the benefits of its treatment increases self-efficacy. According to the description, signs and serious side effects of this disease that cannot be treated, providing practical solutions and creating self-belief and empowerment by using this pattern, had led to a significant increase in self-efficacy and hope in the elderly [6]. Empowerment programs, which include physical, family-centered and community-based activities, will significantly help the elderly to be self-efficacious and empowered [7]. Therefore, the importance of family-centered empowerment model in old age is prioritized because old age is a stage in people's lives that makes them exposed to chronic diseases including high blood pressure [6].

Table 1. Comparison of the mean score of elderly empowerment in feeling of self-efficacy in two groups of experimental and control at different times

Time	Independent T-Test	
	t	P
Before intervention	1.1	0.275
One week after intervention	12.63	<0.001
A month and half after intervention	12.6	<0.001
Analysis of variance with repeated observation	F	111.15
	P	<0.001

The elderly use their own skills and resources to enhance their self-efficacy experience. In this study, it seems that with empowerment intervention and increasing the awareness and mastery of the elderly on some skills such as stress control skills, the skill of measuring blood pressure, self-efficacy has been improved in them [8]. By paying attention to the nature of aging and high blood pressure, the family members and health personnel can improve their self-efficacy. Many of their problems can be prevented if the elderly are well-informed about proper nutrition, exercise, sleep, relaxation, and proper use of medications. Moreover, these problems can be controlled effectively, and measures can be taken to improve the life quality of the elderly [9].

4. Conclusion

Based on the results of this study and the importance of self-efficacy in improving the health of the elderly, it is recommended that workshops focusing on the family-centric empowerment model be held by health authorities so as to improve the self-efficacy of the elderly. Empowerment leads to control of the individual's environment, self-efficacy, and self-esteem. Intrapersonal structures as a set of people's beliefs, feeling of the care provider, and interacting with family lead to self-control, self-efficacy, and self-sufficiency. This is the first study on the use of family-centered empowerment model in the hypertensive elderly. In fact, limited study time and working with elderly people were the limitations of this study.

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Conflict of Interest

The authors declared no conflicts of interest.