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Life skills training, hope, and health: An interventional study in the North West of Iran during the COVID-19 pandemic

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ABSTRACT

Objectives: Suburbanization is associated with an individual's health. This study aimed to investigate the effect of life skills training on the hope and health of women referred to comprehensive health service centers in the suburbs of Khoy city.

Study design: quasi-experimental study (Pre-test/Post-test with a control group)

Methods: in this study, out of 5 comprehensive health service centers, two centers were selected as intervention and comparison groups, and from each center, 37 women were randomly selected. At first, both groups completed the Goldberg general health questionnaire and the Miller hope questionnaire, and the intervention group was taught life skills. At the end of the training, both groups were re-evaluated. Descriptive statistics such as frequency distribution and dispersion indices were used in data analysis. Mann-Whitney and Wilcoxon Signed Ranks Tests were used in inferential statistics.

Results: Group training in life skills did not significantly affect hope (P.value = 0.972) and various aspects of health (P.value = 0.421).

Conclusions: It seems that only interventions such as life skills training will not improve suburban women's hope and health. Perhaps improving social infrastructure and comprehensive living conditions in suburban areas will promote hope and health.

1. Introduction

Hope is a positive motivational state, and the capacity to imagine is the ability to create paths to desirable goals [1]. High levels of hope are directly related to physical and psychological health, high self-esteem, positive thinking, and relationships [2,3]. The results of some studied indicated a relationship between increasing people's hope and health [3,4]. Suburbs and suburbanization are associated with many social, psychological, and emotional harms. The future for these people is uncertain, and they have a shaky hope [5]. In fact, economic problems, poverty, cultural problems, lack of citizenship, and a sense of discrimination are considered as the most critical issues influencing suburban areas and destroying the health of suburban people [6,7]. Based on the epidemiological studies conducted in the suburban population of the city, population and overcrowding, lack of adequate housing, and poor living conditions can act as chronic stressors leading to adverse health outcomes [8,9].

According to Schneider, hope is a state of positive motivation based on a sense of dynamism arising from the individuals' interaction with the environment or mental set, which is based on the mutual feeling of will and planning to achieve the goal [10]. Residents of suburban areas suffer from higher rates of mental illness and suicide than other urban residents [11]. In high-income countries, the sense of hope has steadily increased over the decades except during periods of war, famine, and infection. However, it has been stagnated or decreased in poor and suburban groups [12]. Today, some researchers believe that promoting a sense of hope leads people to healthier social relationships and higher mental and physical health [1]. To achieve a good level of health and overcome the emotions and stresses in everyday life, life skills training including decision-making and problem-solving skills, creative and critical thinking, effective communication, creating and maintaining interpersonal relationships, self-awareness, empathy, coping with emotions and coping with stress is introduced [13]. Knowing themselves and feeling well about themselves is considered as one of the most critical factors which help people live successfully. Ottawa Charter expressed personal skills as one area alongside healthy public policies

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which create supportive environments, strengthen community action, and reorient health services for health promotion [14]. Developing personal skills often refers to health education and raising the level of health literacy of individuals [15]. Health professionals can pave the way for individual and social development leading to sustainable health improvement by providing health information and improving health literacy [14–16]. Life skills help people learn more about themselves and their personality, needs and wants, goals, strengths and weaknesses, feelings, values, and identity [17]. Life skill training aims to prevent, control, and manage problems, which is suitable for group and individual interventions as an educational strategy. Numerous studies have shown that training life skills can effectively reduce anxiety and depression [18,19], as well as academic failure [20]. The issue of women's health development management is among the priorities of the World Health Organization, and scientific centers have considered it as the central area of strategic health development in the next decade [21]. The effectiveness of life skills training on suburban women's health and hope has less been emphasized in Iran. Therefore, the present study aims to determine the relationship between group life skills training and health and hope among suburban women.

2. Method

In the present quasi-experimental study, an ethics code was obtained from Khoy University of Medical Sciences (IR.KHOY.REC.1399.011). The subjects were women referred to comprehensive health service centers in the suburbs of Khoy in 2020. Khoy is located in the north of West Azerbaijan province at an altitude ranging from 1050 to 2200 m above the sea level between 44° 14′49.45″-45° 15′18″ longitude and 38° 16′56″-39° 06′01″ latitude [22] (Fig. 1). The majority of Khoy people speak Turkish, and the minority speak Kurdish. According to the 2016 census, the population of Khoy are 348664 people [23]. We used a multi-stage sampling method for the sample section. Two centers were randomly selected based on a multi-stage sampling method from five comprehensive health service centers, and one of which was selected as the intervention group. The intervention group consisted of 3561 women over 15 years with electronic health records and the comparison group included 2998 women over 15 years with electronic health records. Among the people referred to the centers to receive services, 37 people were randomly placed in the intervention and comparison groups. The sample size was estimated 37 people in each group based on the mean (standard deviation) of 40.88 (±5.37) and 44.44 (±5.44) in the intervention and comparison groups, respectively [24] ($\alpha = 0.05$, $\beta = 0.2$). The intervention group received about five weeks of life skills training in 10, 30, and 45 min sessions. Due to the prevalence of Covid 19 disease during the study and comply with health protocols, training was held in a large space with proper ventilation, physical distance, and free distribution of masks. Informed consent was obtained from the participants after explaining the objective of the study. Some ife skills including problem-solving skills, creative and critical thinking, ability to communicate effectively, establishing and maintaining interpersonal relationships, self-awareness, empathy, coping with emotion and stress were respectively taught by one of the researchers, in each session. However, the comparison group received no intervention.

Before training, both groups completed the 28-item Goldberg General Health Questionnaire and the Miller Standard Hope Questionnaire, and the groups were re-evaluated t the end of the training. The Goldberg Questionnaire consists of 28 four-choice questions and has four scales, each of which has seven questions. The scales included the physical symptoms, anxiety symptoms, sleep disorder, social functioning, and depression symptoms. At each scale from the cut point, a score of 6 and above and a total score of 22 and above indicate pathological symptoms. The score of the questionnaire determines the current health of each person. The Miller questionnaire included 48 questions scored on a Likert scale from strongly disagree (1) to strongly agree (5). The score obtained from the questionnaire determines the amount of hope of each person. SPSS software version 22 was examined by the scores of the referrals of the two groups to evaluate the effect of the training. Descriptive statistics such as frequency distribution and dispersion indices were used in data analysis. Further, Mann-Whitney and Wilcoxon Signed Ranks Tests were used in inferential statistics due to the lack of the presuppositions related to the MANCOVA test.

3. Results

The mean age of the subjects was 28.7 (±7.6) years, among whom 97% were housewives, and the rest were employed. In addition, 97% were married, 36% had a diploma or higher, and the rest had less than a diploma. Further, no significant difference was observed between the two groups in demographic variables such as age, employment status, marriage, and education (Table 1).

The results showed that the two groups were not significantly different in health aspects before the training classes. The overall mean scores obtained from the Goldberg questionnaire were the same in both

Fig. 1. Location of Khoy city.

Table 1
Demographic variables in two groups (intervention group versus comparison group).

Demographic Variables	Group		Test	P. value
	intervention	Comparison		
Age (mean (**SD**))	28.7 (7.8)	28.7 (7.4)	Independent –t	0.938
Children number (mean (**SD**))	1.38 (0.2)	1.76 (0.8)	Mann_ whitney U	0.127
Employed	2	2	Chi-Square	0.999
Housewife	35	35		
<diploma	23	24	Chi-Square	0.803
≥diploma	14	13		
Single	4	3	Fisher's Exact	0.999
Married	33	34		

groups. After training the related life skills, no significant difference was found in the mean of general health scores in the two groups, except in social performance (Table 2). Although significant changes occurred in all aspects of the intervention group after training the skills, the difference was insignificant compared to the control group. Regarding the control group, significant changes happened in depressive symptoms and overall mean health score.

Additionally, the two groups reported a similar hope before the intervention, and the results indicated that life skills training failed to create a significant difference in hope among the subjects in the intervention group. Further, the mean of the intervention and control groups was similar after the intervention although a slight decrease occurred in hope over time in the control group (Table 3). In general, training life skills cannot play a significant role in the aspects of health and hope in the suburban population of Khoy.

4. Discussion

Life skills are considered as the abilities for adaptive and positive behavior which enable individuals to deal with the demands and challenges of everyday life effectively [25]. Life skills training has preventive goals for controlling and managing problems, and is appropriate for group and individual interventions as an educational strategy [26]. These skills play a role in having a healthier life, communicating with others better, having higher decision-making power, solving problems in life, and providing good mental and social health [27]. The results of the present study indicated that training life skills has no effect on promoting hope and general health among the women in the suburban regions in Khoy (Tables 2 and 3).

Table 2
General health score and its dimensions before and after intervention in two groups.

Dimension	Group	Before Mean (SD)	After Mean (SD)	P. value
Physical Symptoms	Intervention	6.51 ((4.46	4.68 (3.54)	0.001
	Control	6 (4.47)	5.97 (3.54)	0.971
	P.Value	0.608	.366	
Anxiety Symptoms	Intervention	6.77 (4.33)	4.82 (3.17)	0.001
	Control	5.74 (5.04)	5.82 (5.02)	0.794
	P.Value	0.241	0.813	
Social Function	Intervention	7.62 (2.78)	6.6 (2.15)	0.026
	Control	7.25 (3.41)	7.91 (3.41)	0.095
	P.Value	0.402	0.049	
Symptoms of Depression	Intervention	4.02 (4.35)	2.6 (3.55)	0.004
	Control	3.05 (4.65)	3.51 (4.58)	0.004
	P.Value	0.103	0.437	
Total Score of General Health	Intervention	24.94 (12.72)	18.71 (10.04)	0.001
	Control	22.05 (15.85)	23.22 (15.87)	0.036
	P.Value	0.143	0.421	

Based on Mann-Whitney and Wilcoxon Signed Ranks Tests.

Table 3
Score of hope before and after educational intervention in two groups.

	Group	Before Mean (SD)	After Mean (SD)	P.value
Level of hope	Intervention	163.82 (16.50)	164.65 (12.71)	0.640
	Control	170.88 (14.33)	166.05 (14.06)	0.004
	P.Value	0.167	0.972	

Based on Mann-Whitney and Wilcoxon Signed Ranks Tests.

Community health among the women is more vulnerable than men for different reasons, which is affected by cultural, social, economic, and political determinants in addition to biological characteristics [21]. The cultural conditions prevailing in these areas do not allow women to express and share their physical problems and health status with others [28]. Given the strong relationship between health and hope, it seems that the sense of hope should be promoted in women to enhance their health [1]. It is necessary to develop and strengthen the abilities and skills which guarantee the health of individuals in difficult situations [13]. Symptoms of depression and anxiety are common among young people [29] and women [30], which are strongly associated with frustration. Disappointment as a sign originated from negative experiences and perceptions of the future which affect individuals' psychosocial status and role [5].

The results of most studies have indicated a significant effect on life skills training on hope and health in different populations. Rajabi and Eslami investigated the effect of life skills training on psychological well-being and happiness of older women in Abadeh and showed that the intervention could improve the score in the intervention group. In addition, it indicated the need to re-hold these courses at short intervals for the elderly [31]. In another study. Rahimi et al. assessed the effect of life skills training on hope and happiness among 40 students in Sabzevar University of Medical Sciences. Oxford Happiness and Snyder Hope questionnaires were used for data collection before and after the intervention. The results showed that life skills training can improve hope and happiness among the students [32].

However, Sepahvand et al. studied the effect of life skills training on increasing mental health and concluded that life skills training failed to influence morbid, paranoid, and psychotic symptoms [20]. In addition, Mayan et al. focused on the effect of life skills programs on chronic mental illness among schizophrenic patients and showed that life skills cannot play a role in the quality of life or social performance skills scores compared to the support groups [33]. Further, Niko et al. reported that obsessive beliefs cannot decrease significantly [34].

The coincidence of the present study with the epidemic of Covid-19 may be considered as one of the most important reasons for the ineffectiveness of life skills training on hope and health among women in the suburbs of Khoy. In this regard, Safaralizadeh et al. investigated the effect of group skills training on health before the outbreak of the Covid-19 pandemic in Khoy and indicated that life skills training improves the health [35]. Based on the available scientific documents, the effect of the Covid-19 pandemic on health is not the same everywhere in the world, and underdeveloped and developing countries have been more affected by this pandemic [36,37]. Finally, the economic effects and food insecurity caused by this pandemic have been more significant in poorer countries [38].

5. Conclusion

Based on the results, life skills training failed to play a significant role on increasing the hope and health among the women in the suburban regions of Khoy. It seems that the crisis of the Covid-19 epidemic and the conditions of sanctions on Iran have exacerbated the living and economic problems in the suburbs and financial support measures are necessary, especially for women in the suburbs.

Ethical approval

This present study obtained an ethics code from Khoy University of Medical Sciences (IR.KHOY.REC.1399.011).

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Authors' contributions

HS and RSH conceived and designed the project. TA and EZ acquired the data. RSH analyzed and interpreted the data. HS, TA and EZ wrote the paper. All authors approved the final text.

Declaration of competing interest

The authors declared no conflicts of interest.

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