Life Skill Training and Mental Health of Employed Women

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An experimental study has been conducted to determine the effect of life skill training on the mental health status of women working in Bushehr University of Medical Sciences. An intervention group received life skill training and for the control group, Osteoporosis training class was performed as placebo. GHQ-28 questionnaire was used in this study and the collected data was analyzed via ANOVA, paired t-test and Wilcoxon non-parametric test. Although, the results show that the mean difference between pretest scores of two groups was not significant, it was statistically significant for post-test scores (P<0.05). Besides, a significant change in mental health status of participants of the intervention group was observed in all subscales of the questionnaire except social dysfunction. It seems that life skill training would be effective in the promotion of employees' mental health status, ultimately leading to an increase in organization's productivity.

Keywords: Life Skill, Staff, Mental Health, Employed Women.

Health is not merely the absence of disease or infirmity, but rather, a state of complete physical, mental and social well-being (WHO, 2001). A mentally healthy person is the one who can cope nicely with life problems and changes, is accountable, uses his mental abilities in a proper way, has a good and compatible relationship with others and engages in useful and effective activities. Mental health has a large scope and its status may change during life time (Bolhari, 2002). The latest investigations show that the burden of mental diseases and behavioral disorders such as depression and anxiety is too high in Iran. Although, these diseases encompass years of life lost (YLL) due to premature death, they are at the top of causes of increase in the years of life lived with disability (YLD) especially in females (Naghavi, 2007).

Epidemiological studies indicate that depression is one of the most costly diseases of the workforce. Patients with this disorder are 27 times as likely as healthy people to encounter impairment and face an inability in doing their duties. It is estimated that 30% of the absenteeism and decrease in efficiency is due to depression (Kendler, Gardner, & Prescott,

2006; Khadivi, Moezzi, Shakeri, & Borjian, 2005). In most of the societies, however, people's knowledge about the related factors, ways of prevention, methods of self-caring and even pharmaceutical and psychological treatments, is poor (Highet, Hickie, & Davenport, 2002; Jorm, 2000).

In order to improve mental health and prevent disorders at the community level, World Health Organization (WHO) introduced life skill training program in 1993. This program contains 10 core skills including empathy, effective communication, interpersonal relationship, decision making, problem solving, critical thinking, self-awareness, coping with emotions, creative thinking and coping with stress. To implement this program in various countries such as Iran, training in core skills is on the agenda (Beirami, Ahmad, & Jalali, 2007). Basically, if contents of life skill training program lead to self-knowledge and an increase in participant's psychological ability, it can promote their mental health. In these trainings, which are offered in group form, an atmosphere of certainty about making a sound and soothing relationship is provided. During these trainings, an individual

can transfer his learned lessons to a larger community and in return can use other people's experiences and knowledge to soothe himself.

Living in this competitive world may expose us to lot of tensions and stresses. Indeed, employees currently tolerate many tensions and conflicts while performing their duties that threaten their mental health and professional competency. Meanwhile, one of the biggest problems of organizations is recruiting and keeping their man power. Thus, only those systems can expect growth and productivity that have invested in training their staff.

Life skill training is one of the investments to promote psycho-social health level of the staff. It benefits staff's both personal (private and social) and professional (work) life (Naeini, 2009). Learning and practicing these skills will lead to alteration or reinforcement of attitudes, values and behaviors. It is believed that many mental health problems are preventable when positive and healthy behaviors are obtained (Khalesi & Alikhani, 2003). Since, learning life skills has an important role in improvement of intrapersonal and interpersonal relationships, its training can be a part of secondary prevention program to control many chronic diseases of the present century such as depression and cardiovascular diseases (Ssogolitappeh, Kheyroddin, Aliloo, & Beirami, 2008).

In terms of mental health, women are more susceptible than men. Promotion of women's mental health index and their enjoyment of a high quality life have always been emphasized by international organizations. In Turkey, for instance, improvement of women's health status is an important criterion of social development and therefore, authorities pay a special attention to that. An investigation by Nasir et al. showed that during the past decade, rate of life expectancy, general level of happiness, sense of improvement in life status and life progression among Turkish women has had a considerable rise(Nasiri, Fesharaki, Badvi, & Bakhtyari, 2011).

The present study is conducted on women working at the central organization of Bushehr University of Medical Sciences to determine the effect of life skill training on the promotion of women's mental health.

Method

Participants:

An experimental study was conducted among all women working at the central organization of the Bushehr University of Medical Sciences in 2010. After general notification and registration of all the interested people, the required sample was selected, which included women who were 24 years old and over, and who did not have any severe physical or mental disease. By using Cohen table, setting the alpha level at 0.05 and also the effect size and the test power equal to 0.05 and 0.88 respectively, the sample size was calculated to be 20 people in each group. Due to prediction of the potential loss of participants during the intervention, eventually 50 qualified people were recruited to this study (intervention group= 25, control group= 25). Convenience sampling was the method used to select the subjects. After getting informed consent, the participants were assigned into intervention and control groups according to their age and education level.

Tool:

General health questionnaire (GHQ-28): It was developed by Goldberg and its validity and reliability has been verified repeatedly in Iran. While the calculated sensitivity and specificity of the questionnaire by Noorbala et al. was 84.7% ± 2.7 and 93.7% ± 2.7 respectively, Yaghubi et al. evaluated sensitivity and specificity to be equal to 86.5 % and 82%, respectively (Noorbala, Yazdi, & Mohammad, 2008; Yaghubi, Nasr, & Shahmohammadi, 1995). In a study conducted by Bahmani et al. the reliability coefficient of the whole questionnaire was 0.96. This number for subscales of depression, anxiety, psychosomatic symptoms and social dysfunction was 0.94, 0.90, 0.89 and 0.78 respectively (Bahmani & Asqari, 2006).

The GHQ-28 incorporates four subscales: somatic symptoms, anxiety and insomnia, social dysfunction, and severe depression. Each subscale of this questionnaire includes 7 items. For each item, four answer possibilities are available, including "0-not at all", "1-no more than usual", "2-rather more than usual" and "3-much more than usual". In this study, the Likert scoring procedure (0, 1, 2, and 3) is applied and the total

scale score ranges from 0 to 84. If the score is high the psychological well-being of the patient is poor. The decided cut-off point in this study was 28; therefore, participants who got less than 28 were considered symptom-free and those who got a score above that, were considered with disease symptoms.

In this study, the GHQ-28 questionnaire was filled-in three times by all participants: in the first session before initiation of training, two days after and three months after completion of life skills training.

Procedure:

For the intervention group, life skill training was performed by an experienced psychologist in attending form. There were 13 sessions each of 2.5 hours teaching, twice a week. In these classes, other than group training of self-knowledge, 10 core life skills were presented in an active learning approach. In control group, osteoporosis training was performed one hour per week, as a placebo.

Results

There were 25 women in the intervention and 25 in the control group. Six people (3 people from each group) refused to continue their participation; therefore, 22 participants remained in each group (response rate = 88%). Until the end of the program, analysis was performed according to the remaining participants. The highest percentage of participants in both groups were those aged 40 years and above. In order to compare qualitative variables (demographic characteristics) in intervention and control groups, the Chi-square test was used. At the beginning of the study, in terms of age, education level, job experience and type of employment, there was no significant difference between intervention and control groups. Demographic characteristics of the participants are summarized in Table 1.

As it is shown in the table, there was no significant relationship between participants' mental health average score and demographic

Table 1. Demographic Characteristics of Participants

	Intervention group		Control group		
	Frequency	Percentage	Frequency	Percentage	P- value
Age					
25-29 years	3	13.6	6	27.3	0.71
30-34 years	6	27.3	5	22.7	
35-39 years	3	13.6	2	9.1	
40 years	10	45.5	9	40.9	
Education					
Diploma	6	27.3	6	27.3	0.93
Associates degree	8	36.4	9	40.9	
Bachelor degree and above	8	36.4	7	31.8	
Type of employment					
Formal	13	59.1	10	45.5	0.27
Contractual	9	40.9	12	54.5	
Job experience					
<10 years	7	31.8	9	40.9	0.81
10-19 years	5	22.7	4	18.2	
20 years	10	45.5	9	40.9	

variables (age, job experience, type of employment, education and marital status) in two groups, before the intervention. Before trainings, 13.6% and 22.7% of the participants in the intervention and the control group were symptom-free, respectively (P=0.34). Although, the difference between percentages of symptom-free participants of both groups was not statistically significant, after performance of training program 81.8% of the intervention

group was symptom-free. The number for control group was 18.2% and the observed difference was definitely significant (P<0.05). Since distribution of mental health score was not normal, to compare two groups, Wilcoxon non-parametrical test was used. The mean difference between pretest scores of two groups was 0.0 ±1. 41 which wasn't statistically significant (P=0.646), two days after completion of training the mean difference between post-

Table 2. Significance of the Mean Difference between Pretest and Posttest Scores in each GHQ-28 Subscale

	Questionnaire subscale	Difference between	Intervention group P-value	Control group P-value
1	Psychosomatic symptoms	Pretest- posttest of 2 days after completion	0.90*	1
		Pretest-posttest of 3 months after completion	0.09*	0.33
		Posttest of 2 days after completion-posttest of 3 months after completion	0.005	0.33
2	Anxiety and insomnia	Pretest- posttest of 2 days after completion	0.03	1
		Pretest-posttest of 3 months after completion	0.03	0.63
		Posttest of 2 days after completion-posttest of 3 months after completion	0.03	0.87
3	Social dysfunction	Pretest- posttest of 2 days after completion	0.92*	1
		Pretest-posttest of 3 months after completion	1*	0.39
		Posttest of 2 days after completion-posttest of 3 months after completion	0.92*	1
4	Severe depression	Pretest- posttest of 2 days after completion	<0.001	1
		Pretest-posttest of 3 months after completion	<0.001	0.09
		Posttest of 2 days after completion-posttest of 3 months after completion	<0.001	0.48
5	Total	Pretest- posttest of 2 days after completion	<0.001	0.55
		Pretest-posttest of 3 months after completion	<0.001	0.50
		Post-test of 2 days after completion-posttest of 3 months after completion	0.90*	0.35

test scores was 20.68±1.31. Three months after training, this number was 18.23±1.58 and at both points after training, the difference between the two groups was significant (P<0.05 at both points). Analysis of various subscales of the questionnaire also showed that after life skill training, in all subscales except social dysfunction, a significant change in mental health status of participants did occur. Table 2 shows the other outcomes of the analysis.

Discussion

Mental health is defined as a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community (WHO, 2013). A study conducted by Jafari et al. in 2008 showed that according to GHQ-28 questionnaire, 20% of office workers of Isfahan Oil Refining Company were suspected of having mental disorders (Jafari, Nikneshan, & Abedi, 2012). Another study by Kaheh et al. on staff of administrative, research and education sectors of two organizations showed that mental health score of 55.5% of people was below average (Kaheh & Hayoodi, 2012). For hospital and health service staff, the situation was the same.

In this study, 86.4% of the intervention group and 77.3% of the control group had symptoms of mental disorders, before the intervention. Sadeghi et al. studied the hospital staff in Qazvin city and reported that the prevalence of mental disorders is at a moderate level. They indicated 5.7% of the studied population had physical problems, 2.8% of them in terms of social function and 11.4% in terms of anxiety had mental disorders. In addition, 1.4% of the studied population had depression (Sadeghi, Rahmani, & Kiani, 2011). At the beginning of the present study, there were no significant associations between the participants' mental health score and their demographic variables. Sadeghi et al. (2011) also showed that there is no statistical significant relationship between demographic variables (including age, sex, marital status, employment status, field of education, number of children) and mental disorders. On the other hand Hajebi and Faridnia indicated that although there is no significant relationship

between sex and staff's mental health in Health Service Center of Bushehr Oil Industry, married people are enjoying a more desirable mental health (Hajebi & Faridnia, 2009). Perhaps, one of the reasons of failure to find a relationship between mental health score and investigated demographic variables is the homogeneity of the participants of these studies, all of them being staff of the same organization.

In life skill training program, people are helped to manage their negative emotions and express it in a proper way. The main objective of performing this program is to provide some opportunities for people to learn life skills along with developing professional and occupational abilities. Life skills help people to act maturely and effectively in relation with others (Khani, 2006). A meta-analysis study which contained 69 life skill training programs showed that these trainings had been 11% effective in improvement of depression (Jané-Llopis & Barry, 2005) .However, a study on female staff in Tehran did not show any significant relationship between life skill training and depression improvement (Moinalghorabaei & Sanati, 2008).

Comparison of pretest and post-test scores in the current study demonstrates an increase in the awareness of those who attended life skill classes. Significance of statistical tests also confirms it and emphasizes on the effectiveness of these trainings on the promotion of staff's mental health, especially in depression subscale. Our result is comparable with the results of other studies in this field. In a similar study, Moin Al-Ghorabaee and Sanáti asked 84 people of women working at Tehran University to attend life skill training classes for 10 weeks and observed that for those with psychological symptoms like depression, anxiety and psychosomatic dysfunctions, the mean score obtained from GHQ-28 became significantly less than before intervention and this reduction was more obvious in measures related to depression symptoms. They concluded that the presented trainings have been effective (Moinalghorabaei & Sanati, 2008). Results of Khadivi et al.'s (2005) study in Ardal city also confirmed the effectiveness of life skill trainings in promotion of mental health and primary prevention of suicide. Lafromboise et al. reported the same results

as well (Laformebise & Howard-pitney, 1994). According to a research by Naderi, effectiveness of life skill training in improvement of general health, self-esteem and self-presentation was high (Naderi, Nasab, & Varzandeh, 2009). In 2006, during their study, Moradi and Kalantari came to the conclusion that life skill training in women with somato-motor disabilities leads to an improvement in mental health and decreases anxiety and social incompatibility (Moradi & Kalantari, 2006). Faller et al. showed that life skill training decreases anxiety and depression in people with cancer and therefore, increases their life expectancy (Faller & Schmidt, 2004). Folke et al. demonstrated that treatments, which are based on self-acceptance and coping skills, improved depression and stress promote general health and quality of life (Folke, Parling, & Melin, 2012). The effectiveness of training of coping skill in physical health and promotion of quality of life has been confirmed in other studies (Grey, Elizabeth, Davidson, Ju, & William, 2011).

This study showed that effectiveness of life skill training has no significant relationship with age, job experience, education and marital status of people. However, Khadivi et al.'s study indicated that although the effectiveness of life skill training is not related to job and marital status, it has a significant relationship with education level. Since, this variable (education) does not comply with a uniform trend, researchers proposed some confounding factors like interest and motivation as the reason (Khadivi et al., 2005).

One of the limitations of this study is sex homogeneity of participants. Having multiple roles such as being a wife or a mother at the same time and having social and professional roles to handle together can cause some different types of stresses in women as compared with men. In addition, prevalence of mental disorders and their burden among men and women is different. For example, burden of bipolar disorder and addiction in men and depression, obsessive-compulsive and panic disorders in women, is higher (Naghavi, 2007). Therefore, it is suggested to recruit both genders in researches of this type in future.

Another limitation of this study is judging mental health status from GHQ. It is an objective test and its results are based on participants' speech accuracy and honesty. In addition, questionnaire subscales show symptomatological aspects and they are not necessarily equivalent to psychiatric diagnosis. Therefore, in future researches it is better to use more reliable tools or clinical interview together with GHQ to minimize tool related biases.

Results of this study demonstrate the role of group training in development of effective strategies for promoting mental health and practicing primary prevention (expansion of group social welfare activities, reinforcement of self-awareness at all levels of life, elimination of individualism backgrounds and help to be "oneself" in communications) and also secondary prevention of mental problems (treatment of psychosocial harms). Since, many of neurosis and psychosis are due to defects in developing basic life skills, training them is considered to be a treatment (Ginter & David, 1999). Regular implementation of these programs in workplaces and using experienced professionals can eventually lead to an increase in productivity of organizations.

The more an organization invests in physical and mental health of employees, the less they have to pay for their health care insurance. It shows the importance of the issue, not only in terms of maintaining human capitals, but also in economy and organization's asset efficiency optimization.

Investigations into prevention of psychological disorders with emphasis on performing life skill training programs for staff in stressful settings and evaluating methods and results of these programs is an important step for researchers to assess the process of implementing them systematically. Therefore, they can identify the factors that may strengthen or hinder the implementation of these programs. In addition, it may provide some models of evidence based program. Low GHQ-28 score at the end of three months indicates the continuity of effects of these trainings. Since, examined people are in touch, measuring the amount of effect during longer periods of time can determine the suitable intervals between retraining programs at the workplaces.

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