



The effectiveness of written emotional disclosure training on psychological well-being and quality of life in psychosomatic disorders

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Introduction

Well-being can be considered sense of security and general satisfaction from one 'sown and others' lives in various fields (such as family, job, etc.) [1]. One of the components of well-being is psychological well-being which is "emotional and cognitive assessment of one's life". Psychological well-being includes the experience of pleasant emotions, low levels of negative mood and life satisfaction [2]. In the humanistic model of modern medicine, the health index is the feeling of being good and psychological well-being so that in this

Abstract

This research was conducted with the aim to increase psychological well-being and quality of life through emotional discharge with written structure in psychosomatic disorders. In this study, after implementing comprehensive well-being and quality of life questionnaires, 40 participants with psychosomatic disorder were selected among people attending Imam Khomeini Hospital in Tehran, Iran, based on convenience sampling and reviewing inclusion/exclusion criteria and were assigned into two experimental and control groups. Following written emotional disclosure, the analysis of research data using statistical SPSS-16 software and statistical test analysis of covariance showed that the emotional disclosure with written structure can lead to a significant increase in quality of life, physical health as well as psychological well-being in the experimental group subjects compared to the control group. So, emotional disclosure can help improve quality of life and psychological well-being and improve physical health of people through destroying inhibitory process of emotions in the long term.

Keywords: Disclosure, Psychological, Well-being, Psychosomatic, Quality of life

approach indicators of health and well-being are defined based on quality of life [3].

Based on the model of health, desirable quality of life should encompass several physical, emotional, mental, social, spiritual and occupational dimensions [4], and according to the definition of the World Health Organization quality of life is "individual's perception of own life considering the culture and value systems and its relationship to objectives, expectations, interests, standards, and individual's life experiences" which includes physical health, psychological well-being,

independence, satisfactory social relationships, and individual's personal beliefs [5]. Studies show that emotional and psychological problems are higher in people who have poor quality of life; on the other hand, each of these problems will lead to further reduction in the quality of life [6]. Accordingly, the quality of life is used as a criterion to assess the treatment results and the status of patients with physical and mental disorders [7].

On the other hand, considering the relationship between body and mind as well as physical and mental health of individuals affected by their beliefs, expectations and perceptions of life quality and satisfaction in their lives, many diseases are placed in the category of psychosomatic diseases. The emergence of psychosomatic disorders requires that psychological factors and physical symptoms are linked with each other simultaneously [8].

Emotional disclosure with written structure is one of the coping strategies of people with life stress to deal with life's negative experiences and reduce the physical and psychological adverse consequences of such experiences and stressors. In fact, emotional disclosure means that individual express their most profound emotional experiences for others either verbal or written [9]. Several studies in recent years have confirmed the role of emotional disclosure on the emotional experiences and emotions with encouraging individuals to influence themselves, reduce negative mood, reduce physical problems, increase feeling of personal control, and increase psychological health [9, 10]. Also, some researchers have studied emotional disclosure as one of the strategies to promote mental health, enhance cognitive capacities, and finally enhance the sense of psychological well-being [11], so that studies have shown that emotional disclosure (verbal or written) can improve people's safety performance and physical health [12]. Also, emotional disclosure (in the form of verbal or written for a therapist or in the form of praying) will improve the physical and psychological health symptoms of people and the general performance of individuals [13]. Based on

the foregoing, emotional disclosure can be considered as one of the simple, constructive, low-cost and effective methods to cope with stress and traumatic life experiences. Its preventive role precedes over its therapeutic role. Considering the research findings related to the positive consequences of emotional disclosure on the promotion of mental health and the fact that none of the studies conducted in the field of using emotional disclosure method [e.g. 12, 13] has performed on populations with psychiatric disorders such as depression, psychosomatic disorder etc., the current study examined the effect of training and using written emotional disclosure in the short term on psychological well-being improvement and life quality psychosomatic disorder.

Method

This quasi-experimental study with pretest-posttest was conducted on all people attending Imam Khomeini Hospital in Tehran, Iran, during fall and winter 2011. The volunteer participants had inclusion criteria including suffering from psychosomatic diseases such as headache, feeling a lump in the throat, chronic pain, skin disorders, and gastrointestinal disorders were selected according to DSM-IV criteria and writing ability and exclusion criteria included any physical disability, no severe psychiatric disorders such as bipolar disorder, schizophrenia, obsessive-compulsive disorder or a marked personality disorder by a diagnostic interview and having chronic and incurable diseases. Finally 43 volunteers were selected. The mean age of participants was 31 years and 8 months (age range=19-50 years). Finally, due to removal of 3 subjects from the control group, 40 people remained that were randomly assigned into experimental and control groups, each with 20 people. In this research, the quality of life questionnaire (WHO-QOL-26) and psychological well-being subscale from comprehensive well-being questionnaire were used. The World Health Organization Quality of Life Questionnaire (WHO-QOL-26) [14]

consists of 26 items with four dimensions of physical and psychological health, social relationships and environment and living conditions. Each item is scored according to the Likert scale from 1 to 5 [15]. Nejat, Montazeri, Holakouee Naeni, Kazem and Majdzadeh [16] in their study reported the test retest reliability in the mentioned domains as 0.77, 0.77, 0.75 and 0.84, respectively. Comprehensive well-being questionnaire presented by Keyes [17,18] includes 13 subscales of hedonistic aspects (for example, emotional well-being) and virtue-oriented aspects (for example, social well-being and psychological well-being). According to studies of Frisch et al. [19] the correlation of well-being scales and indicators of life satisfaction and happiness (emotional well-being) with depression scales is about 0.4 to 0.5. In Iran, Cronbach's alpha has been reported 0.76 for the social well-being subscale, 0.6 for psychological well-being subscale and 0.8 for emotional well-being by Joshanloo, Rostami and Nosratabadi [20]. The emotional disclosure was implemented in this study as follows. After being briefed, all subjects filled out the ethical consent form to participate in the study and the experimental group subjects pledged to disclose their negative emotions in written at home in a quiet room during a month, once a week, each lasting 15 to 30 minutes. They were told that every event with emotional state especially negative feelings could be the subject of writing. Assignment forms and

mnemonic work sheets were presented to all subjects in experimental group to remind how to disclose their emotions. All subjects in the experimental and control groups before and after the intervention answered all of the items in the questionnaire on the quality of life [14,15] and psychological well-being subscale from the comprehensive welfare questionnaire [17,18] and also filled out checklist of personal data. After data collection, quality of life scores, physical health and psychological well-being were analyzed by statistical SPSS-16 software and after reviewing the fundamental assumptions, by the analysis of covariance.

Results

In this study, the mean age of participants was 31 years and 8 months (age range= 19-50 years) and they were controlled considering gender, so that all participants were female and their education level was from Diploma to Master's including 12 participants with high school diploma (27.9%), 4 participants with Associate degree (9.3%) and 27 participants with Bachelor's degree (62.8 percent). In terms of employment, 6 participants (14%) were employed and 37 participants (86%) were unemployed and in terms of marital status, 25 participants (58.1%) were single, 16 participants (37.2%) were married and 2 participants (4.7%) were divorced.

Table 1 Covariance analysis test for quality of life of significant different test

Group	Status	M	SD	F	df ₁	df ₂	R ²	P	η
Experiment	Pre-test	76.95	8.185	10.938	1	38	0.790	0.001	0.228
	Post-test	80.10	8.303						
Control	Pre-test	77.35	10.728						
	Post-test	65.75	10.791						

As can be seen in Table 1, ANCOVA results indicate that after eliminating pre-test effect, the quality of life scores are significantly different in the two groups [F=(38,1)=10.938], it means that emotional disclosure with written structure significantly

increases the quality of life in the experimental group subjects compared to the control group [about 3.15]. Also, the effect size of emotional disclosure with written structure is 23% (η=0.228), which represents an acceptable effect size.

Table 2 Covariance analysis test for hygiene and physical health of significant different test

Group	Status	M	SD	F	df ₁	df ₂	R ²	P	η
Experiment	Pre-test	21.60	4.160	15.983	1	38	0.770	0.0005	0.302
	Post-test	22.80	3.888						
Control	Pre-test	21.10	3.127						
	Post-test	20.10	2.972						

As it can be seen in Table 2, ANCOVA results indicate that after eliminating pre-test effect, physical health scores are significantly different in the two groups [$F=(1,38)=15.983$], it means that emotional disclosure with written structure significantly increases physical health in the

experimental group subjects compared to the control group [about 1.2]. Also, the effect size of emotional disclosure with written structure is 30% ($\eta=0.302$), which represents an acceptable effect size.

Table 3 Covariance analysis test for psychological well-being of significant different test

Group	Status	M	SD	F	df ₁	df ₂	R ²	P	η
Experiment	Pre-test	15.82	5.480	275.594	1	38	0.958	0.0005	0.882
	Post-test	86.95	6.263						
Control	Pre-test	83.65	9.794						
	Post-test	77.90	10.223						

As it can be seen in Table 3, ANCOVA results indicate that after eliminating pre-test effect, psychological well-being scores are significantly different in the two groups [$F=(38,1)=275.594$], it means that emotional disclosure with written structure significantly increases psychological well-being in the experimental group subjects compared to the control group [about 4.8]. Also, the effect size of emotional disclosure with written structure is 88% ($\eta=0.882$), which represents an acceptable effect size.

is confirmed. It means that emotional disclosure with written structure could increase the quality of life in the experimental group subjects during four sessions. This finding can be explained based on the theory of Vedhara, Morris, Booth, Horgan, Lawrence and Birchel [21], their studies showed the effectiveness of emotional disclosure on disease severity and quality of life in patients with psoriasis skin disorder and disease severity and quality of life also improved during follow-up and these are consistent with the findings of the current study.

Discussion

The findings of the current study showed that the quality of life, physical health and psychological well-being of patients with psychosomatic disorder significantly increased with the least involvement of the therapist because it was easy to teach the correct way to write, it was self-assisted and did not need personal visits. Therefore, the results in Table 1 show that quality of life in the experimental group subjects significantly increased due to written emotional disclosure training, so the hypothesis

In the study of Gelateri, Peters, Bloomfield and Hom [22] on women with breast cancer, the research findings have also shown that emotional disclosure with written structure can increase women’s perceptions of emotional support, quality of life and high levels of satisfaction and perceptions of social support that these effects were sustained for up to 6 months after the intervention. On the other hand, it is expected that the enhancement of these components increases the quality of life. But this finding is not completely

consistent with the findings of the present study because in this study emotional disclosure with written structure was not effective on satisfaction and social support sub-components, but increased the quality of life in subjects. On the other hand, in another study conducted by Porter, Keefe, Horowitz and Feber [23] on patients with gastrointestinal cancer and their spouses, it was also revealed that disclosure would improve patient's adjustment with the disease, the spouse and communicative function, that these cases are associated with improved quality of life. This finding is consistent with the finding of the current study.

Also according to the results of Table 2, it can be seen that physical health in the experimental group subjects significantly increased due to written emotional disclosure training, therefore the hypothesis is confirmed. It means that emotional disclosure with written structure could increase physical health in the experimental group subjects in four sessions. This finding can be explained based on the research finding of Lepore and Greenberg [24] who believe that the subjects who disclosed more extensively the traumatic events reported greater health and fewer physical symptoms in the months after disclosure compared to the subjects who did so less extensively. Also in line with this study, Goldsmith [12] showed that using emotional disclosure as a treatment can improve physical health. In line with this study, Petri, Fontanilla, Thomas, Booth and Pene Baker [13] in their studies showed that writing about past emotional experiences or problems is effective on mental and physical health. Furthermore, Fersina, Board and Leepour [25] in clinical populations showed that written emotional disclosure significantly can improve the health of patients. The results of this research were stronger for physical health than psychological health and emotional disclosure with written structure was more useful on patients with physical and psychosomatic disorders than on those with psychiatric disorders. This finding is also consistent with the findings of the current study. Table 3 shows that psychological well-being in the experimental group subjects significantly increased due to written emotional disclosure training, therefore the hypothesis is confirmed. It means that emotional disclosure with written structure during

four sessions could increase psychological well-being in the experimental group subjects. This finding can be explained based on the research finding of Pene Baker, Mihell and Nidofer [26] who mentioned that disclosure of emotional experiences and deep exposures with personal issues led to improved psychological well-being and choice of coping behaviors. Furthermore, Langan Fox, Sanki and County [27] also showed that low life satisfaction can be reduced by high levels of self-disclosure. It is expected that increased life satisfaction and decreased mental problems and increased self-disclosure each in turn enhance psychological well-being, which is consistent with the finding of the current study.

We did not follow up the subjects due to limitations in following patients up after training and time limitation. Furthermore, all participants were women because women were more willing to participate, and cooperated in writing more accurately and better, as compared with men. Therefore, it is recommended that written emotional disclosure and its effects on reducing disinhibition in men be studied, emotional disclosure with written structure method be also used on other chronic patients, written emotional disclosure be used with other interventions that work on compromising of 'I', the effects of written emotional disclosure be evaluated in long-term with follow-up, the effects of written emotional disclosure be also assessed with and without medication.

Conclusion

Emotional disclosure with written structure can improve psychological well-being and the quality of life in patients with psychosomatic disorders. Thus, it can be considered by clinicians as a simple, effective and low-cost method to cope with negative life events.

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Contributions

Study design: MA

Data collection and analysis: MY

Manuscript preparation: MY, AN, AA, GM

Conflict of interest

"The authors declare that they have no competing interests."

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