

Evaluation of the Balint Group Effect on Stress of a University Hospital's Female Nurses in Isfahan, Iran

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Abstract: *The aim of this study was to evaluate the effectiveness of Balint group on stress of nurses working in AL- Zahra hospital, Isfahan University of medical science, Isfahan, Iran. Although fifty five nurses were selected and randomly divided in experimental and control groups, due to high rate of drop-outs, eventually data were analyzed by only 12 cases in each group. Experimental group participated in 8 sessions of Balint group in a period of 4 months (one session every two weeks). Coudron stress test was completed as pre and posttest. Data were analyzed by MANCOVA using SPSS-18. The results of this study demonstrated that Balint Group was effective only on stress level of private life subscale ($p < 0.05$). Compared with other research, ineffectiveness of the Balint group on other dimensions of stress might be described by the session's conditions, and cultural factors.*

Keywords: *Stress, Balint group, nurse*

I. INTRODUCTION

Stress is present in almost all areas of life with various degrees. Hans Selye (1936) described it as a nonspecific response of body to any changes and/or adjustment with inappropriate expectations. Stress can trigger many diseases and may lead to serious relationship difficulties. Although exhaustion, anxiety, hopelessness and asthenia are usually attributed to negative effects of stress, unfortunately the results are more than that [1]. The major reasons for stress are life changes, daily involvements, failure, conflicts and long-term tensions [2]. Dealing with work and working conditions are major issues in life which are causing long-term stress.

As therapists have a direct relation to the human suffering, and usually experience more pressure and tension than others. So, they are always exposed to health outcomes of those tensions. An integrative review also showed that healthcare professionals are exposed to high stress and tension levels in their work environment. Stress can be the triggering factor for several types of diseases. If a diagnosis and adequate treatment are not provided and tension is not relieved, the professionals can experience illness that may range from deep sorrow to a depressive crisis. In addition to mental disorders, other medical illnesses may impair the worker; for instance, peptic ulcers, arterial hypertension, herpes, and even heart attacks and cerebrovascular accidents. These illnesses may also be connected with the genetic makeup of each individual. Stress does not cause these diseases, but it may reduce the immunological defenses of the organism, thus opening the way to the emergence of other pathological disorders [3].

Among them, nurses are more closed to the patients not only for pre and post-surgical cares and other medical treatments but also they should be responsive for any complaints about

the deficiencies in health care systems. In conclusion, client-therapist relationship among them could be traumatic. As Occupational Safety and Health Administration of United States is also introducing nursing profession in the top 40 with a high incidence of stress-related diseases and it is believed that nursing is likely to be a stressful job in the Health Professions [4].

Because 80% of healthcare professionals are nurses and 75% of them suffer from some degree of depression along with other physical or mental illnesses, according to Iranian Nursing Organization [5], furthermore, as they are related to people's life, any errors and reduction in quality care for patients could have irreparable consequences. So, identifying and applying methods to reduce stress and traumatic outcomes of it, could improve working condition and bio psychosocial health level among nurses and consequently improve public health. Since the therapist-client relationship identified as a psychological factor in job stress for nursing profession, in order to improve this relationship, this study is aimed to investigate Balint Group's effect on nurse's stress. Balint Group was established in 1950s by Michael Balint for improving physician-patient relationship among family physicians in England.

A Balint group is a purposeful, regular meeting among therapists, with a trained facilitator or leader, to allow discussion of any topic that occupies a therapist's mind outside of his or her usual clinical encounters. A Balint group can have many goals. The presenter might realize a more helpful way of viewing and interacting with the patient; the group might learn to view the case from multiple perspectives (clinician, patient, relationship). The main goal is to improve therapist's abilities to actively process and deliver

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relationship-centered care through a deeper understanding of how they are touched by the emotional content of caring for certain patients [6].

The format of a Balint group is a case presentation (based on memory) for about 3 to 5 minutes and a discussion for 1 hour or more. During the discussion phase, group members are free to get to work on the case themselves using their experience, their imagination and, most importantly, their own emotional reactions [7]. All group discussion is confidential (as in psychotherapy); a safe environment is created to express negative or difficult feelings. The Balint group leader's role is to create a climate of safety, acceptance, and trust; establish and maintain the group's norms by letting each member take a turn speaking; and to promote movement toward the group's task of grappling with the presenter's case. A group leader must understand group process and use his/her own personality and style to move the group forward. There is much evidence in the literature that participation in a Balint group increases participant's coping ability, psychological mindedness, and patient-centeredness [6].

In conclusion, stress is known to cause emotional exhaustion and lead to negative feelings toward job and it contributes to burnout. Moreover, stress in nurses affects their health and increases absenteeism, attrition rate, injury claims, infection rates, and errors in treating patients [8]. Applying ways of helping them to deal with the stressful aspects of the nurse-patient relationship are very important [9]. So, Balint Group sessions were held for them in this study and it is assumed that Balint Group has an effect in stress reduction in female nurses in AL-Zahra Hospital in Isfahan.

II. METHODS

This study was a clinical trial with pre and posttest and control group. Samples included 24 nurses who have BA in nursing and at least 5 years work experience. They were voluntary selected and randomly divided in experimental and control groups. Experimental group participated in Balint Group. All subjects were assessed with Coudron stress scale before and after the trial. Subject's ages were between 32-72 (44.12 ± 8.78).

2.1. Tools used for data collection

Demographic questionnaire

This questionnaire collects data about date of birth, marital status, work experience, education.

Coudron stress scale

This scale contains questionnaires which assess stress level in 4 dimensions, include job stress, Health life stress, stress of private life and personality stress. In this scale, the more score indicate the more stress level [2].

2.2. Procedure

AL-Zahra is the largest hospital in the province of Isfahan and has various specialized clinics and wards. So, it has a large medical team. Due to the fact, AL-Zahra Hospital selected as the population of this study. 20 wards among 40 were selected randomly and invitation about participation in the study sent to all eligible nurses. Among enthusiasts, 45 selected and randomly assigned to one experimental group and 2 control

groups. Pretest and demographic questionnaire completed 2 weeks before start the trial. Experimental group participated in Balint group; one session every two weeks in a period of four months (Thursday at 1:45pm for about 2 hours) was held for them. Sessions are summarized in table 1. One of the control group participated in a meeting sessions with the same conditions of experimental group except Balint experience, and the other, just completed the questionnaires. Although both groups completed their sessions, because of drop-sets of participants, data collected from first control group omitted from study and samples reduced to 24 (12 for each group). A week after last session posttest was completed. Finally, the pre-test and post-test data collected according to statistical methods and related research hypotheses were analyzed.

Table 1: Summary of sessions

Sessions	Session description
First Session	After introduction, leader explained about Balint Group and reasons for choosing this method. Then one member voluntary talked about the last patient that occupied her mind and others discussed the case with emotional content.
The second to seventh Sessions	In every session, one member had a case report and others talked over it in Balint format.
Eight Session	After the final Balint session, thanks and dedicated a memorial gift, To conduct post-test questionnaires were distributed.



Figure 1: Balint Group in AL-Zahra Hospital

III. RESULTS AND DISCUSSION

3.1. Results

Table 2 show the mean of stress and its dimensions in both groups and demonstrates that there are differences between them in pre and posttest in experimental group. Investigating correlation coefficient of demographic variables shows no significant relation between age, marital status, and work experience and covariate variables.

Table 2: Descriptive index of pre and posttest

Variable	Experimental Group		Control Group	
	Pre test	Post test	Pre test	Post test
Stress	292(55.38)	184(51.86)	175(64.92)	179(78.49)
Job stress	90.45(29.92)	85.41(30.67)	79.58(34.57)	85.62(38.89)
Health life stress	44.58(24.16)	47.08(22.10)	53.33(27.71)	51.66(29.79)
Stress of private life	42.91(28.95)	47.08(24.16)	35.00(19.18)	35.00(21.48)
Personality stress	5.66(4.97)	5.08(3.80)	7.25(5.13)	7.00(4.82)

To evaluate the effectiveness of Balint Group in stress reduction, Analysis of covariance was used. Results revealed that Balint group had no effect on stress reduction in nurses (table 3).

Table 3: ANCOVA analysis for effect of Balint Group in stress reduction

Reference	Sum of squares	df	Mean square	F	Significance level	Eta
Stress	45871.58	1	45871.58	18.70	0.01	0.47
Group	85.15	1	85.15	0.03	0.85	0.23
Error	51502.81	21	2452.51	--	--	--

To investigate the effectiveness of Balint Group in reduction of stress dimensions, Multivariate analysis of covariance was used and for homogeneity of variance, Levine's test was used. Findings indicated that Balint Group had an effect only on one dimension of stress (table 4).

Table 4: Test of homogeneity of regression gradient interactive effects of experimental and control groups

Homogeneity of covariance and dependent	Levine statistics	df1	df2	Significance level
Job stress	1.67	1	22	0.20
Health life stress	0.01	1	22	0.93
Stress of private life	3.75	1	22	0.06
Personality stress	2.60	1	22	0.12

One-way analysis of covariance was used to investigate differences in the effectiveness of Balint Group on different aspects of stress. Findings demonstrated that with control of covariate variables, there was a significant difference between control and experimental group in stress of private life's mean. According to Eta, 19 percent of the differences were related to Balint Group (table 5).

Table 5: One-way analysis of covariance for differences in the effectiveness of Balint groups on different aspects of stress

Reference	Sum of squares	df	Mean square	F	Significance level	Eta
Job stress	2028.77	1	2028.77	1.53	0.23	0.07
Group	228.26	1	228.26	0.17	0.68	0.01
Error	23823.59	18	1323.53	--	--	--
Health life stress	4572.28	1	4572.28	14.35	0.01	0.44
Group	11.17	1	11.17	0.03	0.85	0.01
Error	5734.28	18	318.57	--	--	--
Stress of private life	3361.13	1	3361.13	19.44	0.01	0.11
Group	742.95	1	742.95	4.29	0.05	0.19
Error	3111.62	18	172.86	--	--	--
Personality stress	168.72	1	168.72	37.93	0.01	0.67
Group	6.77	1	6.77	1.52	0.23	0.07
Error	80.08	18	4.44	--	--	--

3.2. Discussion

Data collected from Coudron test in this study demonstrated that, stress levels in all dimensions were average, except job stress which was very high among nurses in AL-Zahra Hospital. The results are consonant with study of Hazavehei [10], which was conducted in 2012 on nurses in Hamedan city and showed that 40% of them had more than average psychological stress in their job.

Although findings indicated that Balint Group had no effect on stress level and its dimensions except on stress level of private life, but other researches showed different results. For instance a research that conducted in order to reduce burnout reported changes in professional self-efficacy associated with reduced burnout in a group of 13 nurses and showed significant increases in awareness and cognitive abilities after the Balint group as well as reduced emotional exhaustion and cognitive weariness [11]. The other research on general practitioners also indicated Balint group lead to prevent burnout among them and enabled them to endure in their job and find joy and challenge in their relationships with patients [12]. Due to the fact that many studies have confirmed the effectiveness of Balint group, the results of present study might be explained by following reasons:

Sessions condition

Ineffectiveness of Balint Group in this study might be explained by time of sessions. Since it was impossible for most nurses to attend in session during their work hours and the sessions were held after that, therefore being worry about home responsibilities and work exhaustion might reduce their eagerness to stay at hospital. On the other hand, duration of holding meetings in almost researches which showed the efficiency of Balint Group was at least 6 months. For example, Klitzing [9] held one year Balint session for nurses and could confirm its effectiveness. Robins [13] investigated the effect of Balint Group on primary care physicians for 6 months (every 2 weeks) and confirmed its efficiency on improve care and interact with patients. So, Inefficiency of Balint Group in this research might be explained by the short periods of meetings.

Cultural factors

Emotion cognition and its expression aren't valuing in eastern culture. In fact, from the early childhood not only there isn't proper training about it but also it is

implicitly prohibited. In such cultures, specific attention to the emotional involvement with patient without considering the therapeutic perspectives, problems in hospital, judging performance of others and giving advice to them, as expected in Balint, seems difficult. Although, their description of the situation was well and satisfying but what behind these events (the emotions and feelings) weren't easily recognizable and expressed. Moreover, in such cultures, convinced that the emotional expression and shared experience with coworkers lead to ease tension, improve interaction with patients and solve any problems, seemed to be impossible or at least very difficult. As seen in this study, although nurses well engaged with sessions and the Balint framework well maintained, but they expected more specific results or particular strategies to reduce stress in the final sessions. As previously mentioned, Balint group was effective only on stress level of private life. At the beginning of the Balint Group, nurses were trained about emotion cognition, as well as differences between thought and feeling and cultural reasons about lack of emotional expression. Furthermore, their continuous presence at meetings with the focus on emotional expressions about patients and therapeutic conditions might have positive effect on their emotion cognition and being aware about emotional involvement in different life conditions. So, might try to express their feelings especially in private life and as expected, expression of feelings can lead to the reduction of stress in their private life.

IV. CONCLUSION

According to the results of this study, Balint group was effective only on the "private life stress" of the nurses. This might be explained by relatively short period of the study and cultural issues. On the other hand, considering the high level of tension that nurses experience in their job, together with the importance of this profession in public health, it is highly recommended that regular meetings to talk with other colleagues, as well as emotional ventilation, be held in hospitals. Moreover, because the Balint group is actually a style of practitioner self-care, educational sessions during nursing training, can promote understanding and also effectiveness of this kind of treatment.

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