



Original Article

The effectiveness of integrated group therapy on clinical syndrome in personnel of Ibn-e-Sina teaching psychiatric hospital in Mashhad

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Abstract

Introduction: Work at a psychiatric hospital and its associated pressures can lead to anxiety and depression in personnel, which affects the quality of care provided to psychiatric patients. The present study aimed to assess the effect of integrated group therapy on clinical syndrome in these personnel.

Materials and Methods: Among personnel of Ibn-e-Sina hospital who were willing to participate in the study, cases with higher score than cut point in Depression, Anxiety and Stress Scale (DASS) were selected and they divided into control (n=25) and experimental groups (n=25) randomly. The experimental group received 12 weekly sessions of integrated group therapy and the control group assembled in a group. At the end of sessions, all cases fulfilled DASS again. The data analyzed through descriptive statistics, t-test and SPSS software.

Results: The results showed that the total scores of DASS in the experimental group had a significant decrease compared to the control group ($P=0.006$). The subscales of anxiety and depression decreased significantly ($P=0.001$ and $P=0.015$, respectively), but there was no significant difference in the subscale of stress ($P=0.10$).

Conclusion: It seems that integrated group therapy can reduce depression and anxiety in personnel of psychiatric hospital.

Keywords: Clinical syndrome, Integrated group therapy, Personnel, Psychiatric hospital

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Introduction

Mental health is of utmost importance in promoting national and ideological goals in terms of saving on material and spiritual costs. According to the findings, mental disorders are most important and significant components of total burden of illnesses and it is predicted that the share of mental and neurological disorders in general burden will increase by 5% per year (1). Therefore, it is important to pay attention to mental health in all areas of life including personal, social and occupational life (2).

The World Health Organization (WHO) announced in 2009 that people working in the community were more likely to be infected, harmed, and diminished (3). One of the most important areas of health development in societies is the health sector, which is directly related to human health, and staffs in hospitals, especially psychiatric hospitals, are more likely to be subject to psychological damage (3-5). Factors such as high workloads and lack of support systems (6), frequent communication with mentally ill patients, lack of cooperation and mutual understanding by patients and their companions, and even their families (7), high gap in income level and social status (8), and improper communication between surveillance systems and other colleagues (9) can all contribute significantly to the level of stress and psychological problems in a person.

In addition the stressors such as the direct and intimate relationship with the problems that aggravate stress, caring psychiatric patient who is not aware of his/her illness, and the existence of a cycle of irritability, violence, and suicide led to high prevalence rate of psychiatric problems such as anxiety, depression and burnout among personnel of psychiatric hospitals (7,8). Also, the inappropriate effects of employees' psychological problems can lead to

deterioration in the quality of education and it is an inappropriate pattern for students that aggravates the vicious cycle and affects the mental health of students and assistants. The available evidences indicated that the effectiveness of group intervention in medical education settings has never been studied in Iran, and most of Iranian and foreign researches have been focused on the correlation of different factors; for example, the relationship between burnout and mental health decline (10-12). Mental health has been rarely studied on all the staff of hospitals and very few studies have been conducted in this field in our country; so the impact of these interventions on the educational system has never been addressed. The Iranian studies about mental health of staff indicated that about 45.6% if them do not have mental health which shows the necessity of implementing therapeutic interventions in this group (13), especially in medical staff who have more psychological problems (14).

Designing an intervention that can support employees' psychological problems as a mediating and important group in education and treatment by creating a supportive group atmosphere can have a significant impact on reducing clinical symptoms such as anxiety and depression, increasing the quality of educational services to students and assistants, improving the quality of health care, and dramatically reducing the costs incurred by employees' psychological problems on the education and treatment system. The purpose of this study was to determine the effect of combined group therapy on clinical syndrome in personnel of Ibn-e-Sina Psychiatric Hospital of Mashhad University of Medical Sciences.

Materials and Methods

The community of clinical trial approved by ethical committee of Mashhad University of Medical Sciences consisted of all staffs who

working in Ibn-e-Sina Hospital. Inclusion criteria included all psychiatric staffs in different wards of Ibn-e-Sina Psychiatric Hospital who scored higher than cut-off score on DASS questionnaire and they were willing to participate in the study. Exclusion criteria concluded: having specific medical conditions, psychotic disorders or substance abuse and having problems with impulse control disorder during the group session. The samples were selected from all psychiatric staff of different wards of Ibn-e-Sina Psychiatric Hospital who scored higher than cut-off score on DASS questionnaire. They were eager to join the group and collaborated on a voluntary sampling method. According to Cohen's statistical table, the sample size with effect size of 0.8, alpha of 0.05, and beta of 0.20 was estimated to be 25 for the control and experimental groups.

Research instrument

A) *Depression, Anxiety, and Stress Scale (DASS)*: It was developed in 1995 by Lovibond and Lovibond. This scale has two forms. The main form has 42 questions through which each of the psychological constructs of "stress", "anxiety" and "depression" is evaluated by 14 different questions. Stress on this scale includes physical and psychological stress. The studies by Lovibond and Lovibond showed that test-retest reliability for the subscales was 0.81 for stress, 0.79 for anxiety, and 0.71 for depression. The validity of the scale was 0.81 and 0.74, respectively. Therefore, this scale has good validity for use in research and diagnostic activities. This scale has the ability to detect and screen for symptoms of anxiety, depression, and stress over the past week and it is best used for people aged over 15 years. The multiple-choice questions with four options are answered by self-assessment. The answers range from "Never" to "Always", so that

people can choose their answers as one of the answers to the question of "Never", "Little", "Sometimes" and "Always". The scores range from "zero" to "three", with zero for "never", one for "little", two for "sometimes", and three for "always". This scale has good psychometric properties among Iranian population (15).

For ethical considerations, in addition to safeguarding participants' rights and keeping confidential information about questionnaires (through numerical code assignment) and content of the therapeutic group, each participant had the right to withdraw from the study at any stage of the study. In addition, group therapy did not have any disadvantages and its superiority and effectiveness have been demonstrated in numerous studies.

The researcher first collaborated with the respected metron of Ibn-e-Sina Hospital to distribute the DASS questionnaire among head nurses, nurses and personnel of Ibn-e-Sina Hospital in Mashhad. After obtaining informed consent, they were randomly divided into experimental and control groups. Each group consisted of 25 subjects and group therapy was held for 12 sessions twice a week.

The content of the intervention was as below:

The initial group meeting focused on introducing the members to each other and to the group leader and expressing the group's rules such as confidentiality, respect for each other, and the timing and number of group meetings and familiarity with the research project.

Afterwards, the focus of the sessions was on expressing concerns and problems related to the work conditions in a psychiatric hospital, including problems and stresses related to dealing with various psychiatric patients and their families, problems related to dealing with colleagues and other staff and problems

related to the bureaucratic system and head members and the impact of these concerns on their physical and psychological well-being.

During these sessions, above issues were discussed extensively and members were asked to address how they were dealing with the same concerns, in order to create both learning and cohesion in the members. Subsequently, anger management and relaxation was learned in situations where one could not escape, and problem solving was examined with the help of members. Other topics in the group included communication skills with psychiatric patients, articulation of hospital rules, communication with their families, and authorities, using thinking, emotion, and behavior in different situations, using members' own examples. At the end of this series of sessions, members' feelings about the sessions and end points were discussed.

In the control group, 12 sessions were held in which the subjects met and talked about their issues. This group was designed to use group-related components such as group cohesion, confidentiality, empathy, and appropriate communication by the therapist and clients, but no supportive intervention was performed. After this time, the clinical symptoms of both groups were evaluated again and the results were statistically analyzed through descriptive statistics, t-test and SPSS software.

Results

Table 1. Independent t-test results on DASS

| Group | Mean | SD | T | df | P |
|--------------|-------|-------|--------|----|-------|
| Experimental | 28.52 | 15.42 | -2.884 | 43 | 0.006 |
| Control | 41.04 | 13.67 | | | |

Independent t-test was also performed for subscales and the results are presented in the following tables. Leven's test results for all three subscales of anxiety, depression and

As mentioned earlier, the study consisted of two control and experimental groups that were randomly assigned to 25 subjects in each experimental group. After withdrawals, the intervention group comprised of 23, and the control group of 22 participants. DASS questionnaire was administered to both groups before and after the intervention.

The mean age of the experimental group was 38.9 ± 5.4 years. They comprised of 65.2% females and 34.8% males. In educational level, 8.7% of them were graduated and 82.6% of the cases were undergraduate, while 8.7% of them had master degree. In term of marital status, 26.1% were single and 73.9% were married. Majority of the participants (95%) were official employees while the rest were pre-recruitment workforce. The participants were all in the morning shift.

The mean age of the controls was 37.5 ± 7.6 years. The controls comprised of 50% females and 50% males. In term of educational level 68.2% of them had bachelor degree while 31.8% of them had master degree. Also, half the controls were married.

Levin test results in anxiety, depression and stress scale showed that the variances were equal ($P=0.611$). The results of independent t-test in anxiety, depression and stress scale showed a significant decrease in the overall scores of anxiety, depression and stress.

stress showed equality of variances ($P=0.174$, $P=0.854$, $P=0.243$, respectively). As seen in these tables, the scores of the subscales of anxiety and depression in the DASS questionnaire with the significance

levels of 0.000 and 0.015, respectively, indicate a significant decrease in anxiety and depression in the experimental group in the post-test compared to the control group.

However, the stress subscale in this questionnaire was not significantly different in the control and experimental groups ($P=0.10$).

Table 2. Independent t-test results for anxiety subscale

| Group | Mean | SD | T | df | P |
|--------------|-------|------|-------|----|-------|
| Experimental | 7.17 | 3.74 | -3.84 | 43 | 0.000 |
| Control | 12.40 | 5.22 | | | |

Table 3. Independent t-test results for depression subscale

| Group | Mean | SD | T | df | P |
|--------------|-------|------|-------|----|-------|
| Experimental | 7.43 | 5.17 | -2.53 | 43 | 0.015 |
| Control | 11.22 | 4.85 | | | |

Table 4. Independent t-test results for stress subscale

| Group | Mean | SD | T | df | P |
|--------------|-------|------|--------|----|-------|
| Experimental | 13.91 | 8.31 | -1.663 | 43 | 0.104 |
| Control | 17.40 | 5.56 | | | |

Discussion

The results showed that the overall scores of anxiety, depression and stress scale decreased significantly in the experimental group compared to the control group. Although structured and rigorous research in Iran has not addressed the impact of group therapy on clinical syndrome reduction, the results of this study are consistent with findings results of which suggest group therapy with cognitive-behavioral or interpersonal approaches reduces depression, anxiety, and increases personal performance (16-21).

Regardless of the approach, it seems that participating in group therapy makes people to know each other, feel safe, and form a group cohesion and bond. They can talk about their concerns and work issues and the impact of these concerns on personal, professional and family life, and also receive empathy and feedback from others, giving others guidance and feeling useful. The unconditional positive attention in the group as well as the way the group communicates emotionally and creates the space for improvement can lead to the development of interpersonal learning, social skills and

social interest, which can eventually lead to workplace wellbeing and thereby promote job performance. In addition, the atmosphere creates a space where staff can express their emotions, fatigue, hopelessness, anxiety, anger and even positive emotions through verbal, rather than emotional actions on psychiatric patients, and such verbalization of emotions opens the space to the psychological world of understanding and empathy with others, whose impact can be seen in the workplace. As in the present study, after completing the group therapy, the personnel's sense of activity and happiness had increased during the celebration of Nurse Day, while there was no trace of staff spontaneity in previous years.

In addition, the approach used in this study was a combination of cognitive-behavioral elements and supportive elements, while allowing members to control their anger in dealing with patients and colleagues and the medical system- which sometimes led to severe failures- manage their interpersonal communication and interaction in the modified group and manage their anxiety. In the discussion of the subscales of DASS, the

combined therapy group resulted in a reduction of anxiety and depression, which is consistent with the research results in which the therapeutic group reduced depression (22,23). However, this was not the case for the stress subscale. This seems to indicate that there is a degree of stress in the daily lives of everyone with a job in a psychiatric hospital and the hazards and problems associated with working in such an environment. In addition, everyday living conditions in the community, including financial concerns (discussed in the group), as well as the ambiguity of one's future career, play an important role in these situations, as discussed earlier and referred in various ways in group therapy sessions. However, relaxation exercises, anxiety control, and talking about distressing emotions appear to have caused emotional catharsis and significantly reduced anxiety and depression.

This study had some limitations include: lack of strong background in this treatment

plan in Iran, lack of Iranian research into the impact of group workplace therapy on reducing clinical symptoms and burnout, interference of group therapy hours with personnel shifts or fatigue after a shift, and use of only one health center. The lack of control over the interventionist variables such as economic, cultural, social and family status should also be considered in the present study.

Conclusion

Based on the findings, an integrative group therapy can reduce the levels of anxiety and depression among personnel of psychiatric hospitals.

Acknowledgment

The research approved by ethical committee of Mashhad University of Medical Sciences. The authors declare any conflict of interests. The authors like to thank all the personnel of Ibn-e-Sina psychiatric hospital for participating in this study.

References

1. Wu SY, Wang MZ, Li J, Zhang XF. [Study of the intervention measures for the occupational stress to the teachers in the primary and secondary schools]. *Wei Sheng Yan Jiu* 2006; 35: 213-6. (Chinese)
2. ILO. Mental health in the workplace: situation analysis (preliminary report). Geneva: US ILO; 2000: 3-5.
3. Cormack MA. The introduction of mental health component into primary health care. World Health Organization. *Int J Social Psychiatry* 1991; 37: 31-40.
4. Lambert VA, Lambert CE, Petrini M, Li XM, Zhang YJ. Predictors of physical and mental health in hospital nurses within the people's Republic of China. *Int Nurs Rev* 2007; 54: 85-91.
5. Lambert VA, Lambert CE. Literature review of role stress/strain on nurses: an international perspective. *Nurs Health Sci* 2001; 3: 161-72.
6. Cheng Y, Kawachi I, Coakley EH, Schwartz J, Colditz G. Association between psychosocial work characteristics and health functioning in American women: prospective study. *BMJ* 2000; 27: 1432-6.
7. Lambert VA, Lambert CE, Itano J, Inouye J, Kim S, Kuniviktikul W, et al. Cross-cultural comparison of workplace stressors, ways of coping and demographic characteristics as predictors of physical and mental health among hospital nurses in Japan, Thailand, South Korea and the USA (Hawaii). *Int J Nurs Stud* 2004; 41: 671-84.
8. Walcott-McQuigg JA, Ervin NE. Stressors in the workplace: community health nurses. *Public Health Nurs* 1992; 9: 65-71.
9. Magennis C, Slevin E, Cunningham J. Nurses' attitudes to the extension and expansion of their clinical roles. *Nurs Stand* 1999; 13: 32-6.

10. Prosser D, Johnson S, Kuipers E, Szmuller G, Bebbington P, Thornicroft G. Mental health burnout and job satisfaction among hospital and community-based mental health staff. *Br J Psychiatry* 1996; 163 (3): 334-7.
11. Ressler DG, Cooper CL. Occupational stress in health services workers in UK. *Stress Health* 1992; 8(2): 79-90.
12. Turnipseed DL. Anxiety and burnout in the health care work environment. *Psychol Rep* 1998; 82(2): 627-42.
13. Sahebi L, Ayatollahi SMT. [Mental health status of hospitals staffs in Shiraz]. *Ofogh-e-Danesh, Journal of Gonabad University of Medical Sciences and Health Services* 2007; 4: 26-33. (Persian)
14. Hashem Zadeh I, Aurangi M, Bahrehdar MJ. [The relationship between job stress and mental health in a group of hospital employees in Shiraz]. *Quarterly journal of Andeesheh va Raftar* 2000; 23: 55-62. (Persian)
15. Asghari Moghaddam MA, Saed F, Dibajnia P, Zanganeh, G. [Preliminary validity and reliability of depression, anxiety and stress scales]. *Daneshvar Raftar* 2008; 15: 23-38. (Persian)
16. Gorter RC, Eijkman MA, Hoogstraten J. A career counseling program for dentists: Effects on burnout. *Patient Educ Couns* 2001; 43: 23-30.
17. Salmela-Aro K, Näätänen P, Nurmi JE. The role of work-related personal projects during two burnout interventions: a longitudinal study. *Work Stress* 2004; 18: 208-30.
18. de Vente W, Kamphuis JH, Emmelkamp PM, Blonk RW. Individual and group cognitive-behavioral treatment for work-related stress complaints and sickness absence: a randomized controlled trial. *J Occup Health Psychol* 2008; 13: 214-31.
19. Petterson U, Bergström G, Samuelsson M, Åsberg M, Nygren Å. Reflecting peer-support groups in the prevention of stress and burnout: randomized controlled trial. *J Adv Nurs* 2008; 63: 506-16.
20. Stenlund T, Birgander LS, Lindahl B, Nilsson L, Ahlgren C. Effects of Qigong in patients with burnout: a randomized controlled trial. *J Rehabil* 2009; 41: 761-7.
21. Ohue T, Moriyama M, Nakaya T. The effect of the group cognitive behavior therapy in a nurse's burnout and intention to resign. *Health* 2015; 7: 1243-54.
22. Lloyd J, Bond F. W, Flaxman PE. The value of psychological flexibility: Examining psychological mechanisms underpinning a cognitive behavioral therapy intervention for burnout. *J Work Stress* 2013; 27: 181-99.
23. Ohue T, Michiko M, Nakaya T. Examination of a cognitive model of stress, burnout, and intention to resign for Japanese nurses. *Japan J Nurs Sci* 2011; 8: 76-86.

