

Effect of Balint-style Group on Empathy and Interpersonal Trust of Medical Students

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【Abstract】 Objective: To evaluate the effects of Balint-style group on improving the empathic capabilities and interpersonal trust among medical students. **Methods:** Thirty volunteers scored lower on empathy and interpersonal trust participated in this study. The volunteers were randomly assigned to Balint group and control group (n=15 for each). The Balint group received programmed training once a week for 10 sessions (3 participants dropped during the training), whereas the control group were free of any intervention. Questionnaires on the empathic abilities and interpersonal trust scale were used to evaluate the training effects respectively on the second day and 6 months later after training. **Results:** The difference was not significant regarding the total scores on empathic abilities and interpersonal trust on the baseline before training between Balint group and control group ($P>0.05$), yet was significant after 10 sessions of training. Follow-up evaluation on the effects by the end of 6 months after the sessions indicated that the Balint group had higher total scores on empathic abilities compared with the baseline, and the Balint group had higher scores on empathic abilities than the control group. **Conclusion:** Balint group can improve the empathic abilities and interpersonal trust for medical students, however, long-term effect on interpersonal trust still needs further verification.

【Key words】 The Balint groups; Medical students; Empathy; Interpersonal trust

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巴林特小组模式对医学生共情与人际信任的影响

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【摘要】 目的: 评估巴林特小组模式对医学生共情和人际信任水平的作用。 **方法:** 采用自愿报名的方式, 选取某医学院临床专业420名大三学生, 每人填写大学生共情能力问卷和人际信任问卷各1份, 在共情总分低于120分, 同时人际信任水平总分低于75分者中招募30名志愿者, 随机纳入巴林特组和对照组, 巴林特组和对照组各15人。对巴林特组开展以提高共情和人际信任能力为目标的巴林特小组模式干预, 每周1次, 共10次。研究过程中巴林特组脱落3人。对照组暂不进行任何干预。在10次巴林特小组干预结束后第二天及干预结束6个月后, 使用大学生共情能力问卷和人际信任量表评价干预效果。 **结果:** 训练前, 巴林特组和对照组共情能力总分和人际信任总分的基线值没有差异 ($P>0.05$)。10次干预后, 巴林特组的评分结果与基线值比较, 共情总分和人际信任总分均高于基线值, 差异有显著统计学意义; 对照组的评分结果与基线值比较, 共情总分与人际信任总分均无显著差异 ($P>0.05$); 10次巴林特小组活动后, 巴林特组和对照组两组间比较, 共情总分与人际信任总分均高于对照组, 差异有显著统计学意义。在巴林特小组活动结束后6个月后进行追踪评估, 发现巴林特组的共情总分高于基线值, 差异有显著统计学意义; 人际信任总分与基线值相比, 差异无显著统计学意义 ($P>0.05$); 巴林特组与对照组两组间比较, 巴林特组共情总分高于对照组, 两组间人际信任总分的差异无显著统计学意义 ($P>0.05$)。 **结论:** 巴林特小组可以有效提高医学生的共情能力和人际信任水平, 但其提高人际信任水平的远期效果有待于进一步探索。

【关键词】 巴林特小组模式; 医学生; 共情; 人际信任

1 Introduction

Physician's empathic abilities are essential to

build a strong doctor-patient relationship, which is known to improve treatment adherence and clinical outcomes^[1]. Empathy refers to the ability to share emotions with others, without confusion between self and others. It integrates emotional resonance, emotion regulation and perspective-taking^[2]. Interpersonal trust, defined

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as an expectancy held by an individual or a group that the word, promise, verbal or written statement of another individual or group can be relied upon^[3], serves as a pivotal element in interpersonal relations, particularly in the health provider-patient relationship. Unfortunately, trust between doctors and patients tends to decline in China, and deterioration in doctor-patient relationship has greatly discouraged the doctors to show their empathy to patients, which declined satisfaction from the patients with their medical care and job burn-out of medical professionals, eventually degrade the therapeutic outcomes. Thus, how to improve the doctor-patient relationships has been a hot topic in China.

Empathy and interpersonal trust are critical in a doctor-patient relationship in clinical setting, yet empathic abilities seem to decline throughout medical school^[4]. This decline has been observed in preclinical students in China^[5], because current medical education has attached much importance to skills and knowledge over cultivation of the human quality. Loss of empathy shall undermine the interpersonal trust as medical students move through the clinical phases of their training^[6]. As a consequence, interventions aiming at promoting empathic skills and interpersonal trust among medical students should be used.

Balint group, named after Michael Balint, a Hungarian psychoanalyst, was initially started in 1950s, with an attempt to help general practitioners(family physicians) to reach a better understanding in general practice. Currently, Balint group has gained access to some homogenous professionals, including psychiatrists, physicians, gynecologists, obstetricians, nurses, psychotherapists, teachers and social workers. The method comprises cases presentation followed by general discussion, led by mental health professional, with emphasis on the emotional troubles of the doctor-patient relationships experienced by a group of physicians in their clinical practice.

Balint groups are practiced in many countries across the world, and mandatory programs in medical education and profession training in America and Europe. However, researches on the benefits and practice of Balint group are limited to improving the doctor-patients relationships through boosting capabilities and

qualities of providers and nurses.

A study conducted by Kjeldmand D^[7] indicated that participation in a Balint group had offered opportunities for medical professionals to uncover their negative feelings and support each other. Participants generally felt that they were more competent in dealing with the patient encounters and better handling the stress from work and life, and able to satisfy the patients with better medical services. Another scholar, Kaatie Van Roy^[8] performed an overview in 94 articles on research of Balint groups published in peer-reviewed journals, and concluded that research on Balint groups were diverse, scarce and often methodologically weak, and suggested that value of Balint group should be further and strongly indicated.

In the past few years, some researchers have noticed the importance of Balint group in training of the medical students in their pre-clinical years. Guillaume Airagnes^[4] reported students who had received doctor-patient relationship training seminar can improve empathizing capabilities, which indicates that specific Balint groups are beneficial to helping health-professionals and medical students in developing their empathy skills and reducing interpersonal difficulties. Atkinson D^[9] reported a series of eight sessions of Balint group in 10 medical students, and proposed that Balint groups were beneficial to medical students by addressing an unmet need in their curriculum and fostering future physicians who were better prepared to meet personal and professional milestones^[10].

Research on the functional Balint groups in China is still in its initial stage. In the past few years, some domestic general hospitals started certain activities relied on Balint groups. CHEN(2011)^[11] described some benefits, including improved competencies in dealing with the psychological problems and relief of the job burnout to a certain extent in physicians after the training sessions, and insisted that this group should be popularized in training basic skills in psychosomatic medicine. Nevertheless, few reports are available on the application of Balint groups in China to medical students for improving the levels of students' empathy. The current study was designed to examine the changes in empathic abilities and interpersonal trust observed in stu-

dents who have finished their training sessions in a Balint group.

2 Methods and Participants

2.1 Participants

420 volunteers from junior students majoring in clinical medicine of a medical college were asked to fill out the questionnaires on empathy and interpersonal trust scales, respectively. Of all the retrieved copies, 398 volunteers' questionnaires were valid (94.8%). Then 30 volunteers scored lower than 120 on the empathy and under 75 on the interpersonal trust were recruited, and equally randomized into Balint group and control group. In the Balint group, 7 were males, 8 females; the average age was (22.13 ± 0.83) years; 9 students were from urban cities, and 6 from rural villages; 11 were from only-one child families and 4 from families more than one child. In the control group, 8 were males and 7 females; the age averaged (22.27 ± 0.79) years; 8 were from urban cities and 7 from rural villages; 10 were from family with only-one child and 5 from family with siblings. The difference was not significant regarding gender, origins and only-one child family or more than one child family between Balint group and control group. Students in both groups volunteered to participate in the activities and received written informed consents.

2.2 Measurement

The College Students' Empathy Ability questionnaire, which followed the component structure as Likert Scale and with 32 items, was programmed by Pan (2010)^[10], with reference to the established theories both at home and abroad and considerations of the empathic ability in Chinese college students. This scale consists of empathy identification, understanding and response domain, and its Cronbach's alpha was 0.84. Higher total score of the scale indicate better empathy ability for the responders.

Interpersonal Trust Scale(ITS) was designed by Rotter J.B.^[3] as the structure in Likert Scale that consisted of 25 items. Cronbach's alpha coefficient was accepted over 0.90, the higher score represents the higher interpersonal trusts.

2.3 Procedure

Group counseling was performed in compliance with the procedures defined by International Balint Federation^[12] in combination with the Chinese models^[13]. The experimental group received seminar sessions for consecutive 10 weeks, and the control group were free of interventions. However, members in the control group were given opportunities to decide participation at will after completion of the training. All members take part in the full training once a week seminar from 9 September, 2014 to 21 November, 2014. Individual session lasted for 90 minutes and each member was offered at least one time to present a case.

In order to ensure the effectiveness of Balint group, we carefully planned the processes by taking the research purpose and member's state into consideration. The process consisted of invitation, case presentation, real questions, group discussion and feedback from the presenters. The first session included background introduction by the group leader, emphasis on confidential principles, training processes and self-introduction among members, and the second to the ninth session were composed of case presentation, feeling uncovering, experience sharing, management of the conflict, discussion, improvement of the empathy, acceptance and interpersonal trusts. The last session was focused on self-comments from participants and sharing of their feelings as well as measures to cope with the anxiety.

The Balint group leaders are trained professionals with excellent psychodynamic theories in psychological counseling, and were missioned to control the time of activities and progress, encourage the participants to give their opinions towards the case and speak out their stories, appropriately coordinate the discussion, and ensure the safety and privacy of the members.

By the second day and the sixth month after completion of the activities, all participants were invited to finish the evaluation on the efficacies through questionnaires using The College Students' Empathy Ability and Interpersonal Trust Scale for college students. All processes were complied with the confidential doctrine for mental measurement.

2.4 Statistical Analysis

Microsoft Excel software 2003 and software SPSS

19.0 were used for data analysis. Paired sample *t*-test and independent sample *t*-test were used in present

study. Coefficient $\alpha = 0.05$ was accepted as significance.

Table 1 The topics, aims and arrangements of the Balint group seminar

Sessions	Topics	Aims and Arrangements
1	Making introduction and warming up	Declaring confidential principles and procedure, self-introduction among members and creating a safe atmosphere
2-3	Listening and understanding	Reports and cases discussion focused on listening and empathizing personal feeling and understanding
4-5	Respect and acceptance	Reports and cases discussion focused on showing respect and tolerating different viewpoints
6-7	Sharing and expression	Reports and cases discussion focused on sharing, conveying personal feeling and thinking
8-9	Trust and cooperation	Reports and cases discussion, focused on mutual trust and cooperation
10	Independence and separation	Summarizing, coping with separation anxiety, blessing and farewell

3 Results

Comparison of the empathy ability and interpersonal trust levels before intervention indicated no statistical significance between the Balint group and control group.

Comparison of the empathy ability and interpersonal trust levels before and after intervention showed that the Balint group was significantly different, yet the control group was not (Table 2). Comparison of empathy

ability and interpersonal trust levels after training indicated that the Balint group had higher levels than the control group, and the difference was significant (Table 3). Follow-up evaluation on the two groups of students six months after training demonstrated that participants in the Balint group had higher level of empathy ability than the controls ($P < 0.01$), whereas the interpersonal trust level had no statistical significance between the two groups ($P > 0.05$) (Table 4).

Table 2 Comparison of the empathy ability and interpersonal trust levels before and after intervention

	Balint group (n=12)		<i>t</i> -value	<i>P</i> -value	Control group (n=15)		<i>t</i> -value	<i>P</i> -value
	Before train	After train			Before train	After train		
Empathy ability	112.42±5.32	130.08±3.18	9.873	0.000	111.27±5.61	113.67±9.45	0.692	0.500
Interpersonal trust	66.17±5.20	74.67±7.01	6.022	0.000	67.80±3.40	66.20±4.36	1.439	0.172

Table 3 Comparison of the empathy ability and interpersonal trust levels after training

	Balint group (n=12)	Control group (n=15)	<i>t</i> -value	<i>P</i> -value
Empathy ability	130.08±3.18	113.67±9.45	5.746	0.000
Interpersonal trust	74.67±7.01	66.20±4.36	3.848	0.001

Table 4 Comparison of the empathy ability and interpersonal trust six months after training between the two groups

	Balint group (n=12)	Control group (n=15)	<i>t</i> -value	<i>P</i> -value
Empathy ability	128.92±6.23	121.33±6.56	3.050	0.005
Interpersonal trust	69.58±5.63	69.60±4.58	0.518	0.609

4 Discussion and Conclusions

The Balint group was first introduced to China in 2006 in a cooperated program (ASIA-LINK) on psychosomatic medicine sponsored by Shanghai Tongji University (China) and University of Freiburg (Germany),

and since then, Balint group has become popular in China. A number of studies conducted in China suggest that Balint group activities can effectively improve the humanities on physician's part and their communication skills as well as job burnout. However, medical students in their pre-clinical years appear emotional distance and clinical neutrality. In order to help the medical students to increase their competence in encounters of patients and enable them to handle the challenge in their relationships with patients in following clinical practice, we tentatively established a Balint group in our students, with an attempt to render them to develop their professional identity.

Generally, our findings indicate that the Balint group can be as a approach to achieving such competence for pre-clinical students, because the scores at baseline were comparable between the two groups concerning the levels of empathy ability and interpersonal

trust before training.

Table 2 shows that the empathy ability and interpersonal trust levels were improved to a certain degree for the Balint group after 10-week training seminar, whereas the control group remained no change. This indicates that Balint group can heighten students' levels of the empathy ability and interpersonal trusts, which is consistent with the previous reports^[4,14]. Table 3 suggests that the empathy ability and interpersonal trust level will not be improved with advance of college years without such specific training.

The facts are that each presenter is supposed to speak out his/her stories in greater detail during Balint group seminar, a context for the presenter to re-examine the experience in the case and develop comprehensive judgment of the case. After the questions, the presenter withdrew himself/herself from the group circle, just silently listening to the discussions from other members. This creates an opportunity for the presenter to reflect on the doctor-patient relationships by the 'Third eye' view—momentary re-observation and perceptions in transposition, thus leading to considerate awareness of the patients' emotion and behavior in depth.

However, other participants in a case presentation have to be careful listeners instead of mere observers, because in this process the participants can place themselves into the roles of the real case and experience reflective self-awareness by orientation either as a doctor or a patient through listening, caring for and understanding of the topics. Importantly, the Balint group can create a climate of safety, acceptance and trust, for the real topics discussed in seminar would be real and subconscious feelings of the presenter, which will allow for a more empathic and shared experience of the doctor-patient relationship^[15].

Balint groups provide a structured process of clinical reflection, through which a doctor's experience of the relationship with a patient can be safely discussed and ethically considered by peers^[16]. Nevertheless, effective communication cannot be achieved unless all participants can reach mutual trust and understanding, whether they being presenters or listeners in a specific group activity, because support and positive opinions

from members are functional in encouraging the participants uncover their genuine views and feelings, and tolerant attitudes towards oneself as well as shortcomings and faults of others may persistently improve the empathy ability and interpersonal trusts of the group members. Therefore, the Balint group activities in a safe and acceptable atmosphere may not only supply psychological support and case discussion for the pre-clinical students but also create a basis for them to improve their effective communication and doctor-patient relationships in true clinical settings.

Follow-up assessment on the outcomes of the Balint group six months after the sessions indicated long-term effect on the empathy ability of medical students. However, the effect on improvement of the interpersonal trust appeared to decline with advance of time. This may be interpreted by that the empathy ability can be born with a person and will not subside as one grows, and the group just focuses on cultivation of the empathic ability for the trainees. Contrarily, interpersonal trust may be associated with the personal perceptions of the participants in their previous life experience^[17], and can be improved in short-term training in a safe and unsuspecting atmosphere, yet not be bettered in long-term for members with negative personal perceptions. This group of students shall be subjected to additional frequencies of the Balint group seminars in order to completely modify their awareness.

In summary, Balint group can effectively increase the levels of empathy ability and interpersonal trusts in medical students, yet long-term effect on improvement of the trust level remains further investigation.

5 Limitations and Future Directions

Some limitations may exist in current study. Firstly, Balint work started in China in mere several years and fewer experience can be drawn on, because the effectiveness should be verified over one to three years of consecutive training by weekly session; Secondly, leader in a typical Balint group shall be qualified through 2-3 years of training in Blint Group Society; Thirdly, Balint groups just focus on genuine doctor-patient relationships, and our study exclusively included the medical undergraduates, who had no real involvement in the

patients except for interning in hospital in short time, and the cases discussed in our Balint group were just the dilemmas or difficulties of the participants in their pre-clinical years.

In a strict sense, our group is defined as Balint-style group, and needs extensive training of the leaders for following trials as well as additional frequencies by extending the timeline. Besides, the participants can be recruited from students in their fifth-year/internship periods, which may help them on how to deal with the doctor-patient relationships in actual clinical settings.

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