

A Preliminary Investigation of Balint and Non-Balint Behavioral Medicine Training

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Background and Objectives: *Despite inclusion of Balint training in US family medicine residency programs, little research exists about the effectiveness of this training in improving residents' behavioral medicine skills. This study compared the outcomes for residents who did and did not undergo Balint training to increase residents' psychological medicine skills in two rural training programs. **Methods:** Fourteen residents from two rural community-based training programs were assessed using the Psychological Medicine Inventory, following standard first-year behavioral medicine training. At one residency program, residents then participated in 9 months of Balint training during the second year of residency training, while at the other program they did not. Both groups were reassessed at the end of the second year of residency. **Results:** Only Balint-trained residents showed gains in self-reported psychological medicine skills, abilities, and confidence beyond levels developed in year 1. **Conclusions:** Balint training enhances the levels of residents' self-reported psychological medicine skills, when compared to standard behavioral medicine curriculum for first- and second-year family medicine residents.*

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Teaching behavioral medicine and providing small-group support to family medicine residents are two requirements of family medicine residency training.¹ Balint group training, which aids in meeting both of these requirements, has become an established part of the behavioral medicine curriculum in many family medicine residencies.² Nearly half of US residency programs (48.3%) recently reported using Balint groups as part of their behavioral science curriculum.³

While the method of Balint training has been described in detail elsewhere,^{4,5} at the core of this training method is a small group of physicians who meet regularly to examine their own patient-physician relationships, through the group members' patient case presentations and faculty-facilitated discussions. This method of exploring the dynamics of their patient interactions, and of gaining insight into their own reactions to patients, may help physicians more effectively meet the biopsychosocial needs and challenges of their patients.⁶⁻⁹

Effectiveness of Training

There is a small but growing body of research that attempts to understand what happens in Balint group training, particularly as it applies to family medicine residency programs in the United States. How effective are these groups in enhancing residents' behavioral or psychological medicine skills?

One recent study questioned the validity of Americanized versions of Balint training that are frequently offered to US physicians in training.¹⁰ Residency programs that offer what they are calling Balint groups appear, at times, to be mixing traditional, analytically based reflective models with educational or didactic interactions, support functions, or residency administrative issues.¹¹ One study has attempted to provide us with a topology for understanding the kinds of ineffective roles that residents self-report in Balint groups.¹² While this empirically based, qualitatively derived topology helps us understand some of the challenges residents face in patient care, it leaves us with unanswered questions about the effectiveness of such Balint training in improving residents' skills.

Other research examined the psychological medicine abilities of 41 graduating family medicine residents using the Psychological Medicine Inventory (PMI).¹³

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Although this was not a study specifically designed to evaluate the benefits of Balint training, graduating residents who had participated in Balint group training showed higher scores than did their non-Balint-trained classmates in the areas of physician self-awareness and awareness of patients' reactions to their physician.

Building on this previous work, the study reported here sought to assess the effectiveness of Balint training in increasing family medicine residents' psychological medicine skills beyond the level of skills obtained through traditional behavioral medicine training during the first and second years of residency. The hypothesis we tested was that residents who receive Balint group training in addition to their standard behavioral medicine rotation will show greater positive changes in PMI scores across time, when compared to residents who complete only standard behavioral medicine training.

Methods

Participants

All participants in this study were second-year (PGY-2) family medicine residents in two community-based, university-affiliated training programs in the same rural, western state. All residents in the PGY-2 year at both training sites were included in the study.

Both programs used a longitudinally integrated behavioral medicine curriculum (one behavioral medicine faculty member in each program who provided "curbside" consultation, daily availability in the clinic and hospital, participation in discussions between residents and physician preceptors, didactic sessions, chart review, and recommendations) combined with a 1-month outpatient rotation in community psychology/behavioral medicine during the first year of residency training (PGY-1).

Group 1 consisted of six residents from one of the programs. There were four males and two females, all Caucasians, in this group. The residents had a mean age of 30.1 years, with a range of 28–33 years. Group 2 was made up of eight residents from the second program and was comprised of eight males, all Caucasians, with a mean age 30.4 years and a range of 26–34 years. Residents in both groups were matched with their residencies through the National Resident Matching Program, having sought a rural, primary care training program in a western state.

Group 1 residents completed the standard first-year behavioral health curriculum and began 9 months of twice-per-month Balint group training in October of their second year. The Balint group met for 1 hour, following noon conference, mid-week, resulting in the group's residents being scheduled out of 1 hour of afternoon clinic or specialty rotation every other week for the remaining 9 months of this study. Group 2 residents also completed the standard first-year behavioral health curriculum but did not participate in Balint training.

Instrument

We assessed participants' abilities in behavioral medicine with the Psychological Medicine Inventory (PMI) developed by Ireton and Sherman at the University of Minnesota. The PMI is an 11-item, paper and pencil, self-report survey instrument, with a nine-point rating scale for each item. Items are designed to assess residents' levels of interest, abilities, or confidence in dealing with psychological aspects of patient care (eg, "ability to make appropriate treatment decisions based upon patient's psychological needs," "skill in developing good doctor-patient relationships," "awareness of my own feelings, values, and needs"). The PMI was chosen for this study because of its high face validity and initial psychometric properties in assessing psychological medicine skills, abilities, and confidence issues, especially as they relate to the patient-doctor relationship, the principal focus of Balint training.

In previous research, the PMI demonstrated convergent validity through strong correlations between residents' self-ratings and independent preceptors' ratings of the same attributes. Also, instrument-item analysis and factor analysis indicated two factors in overall scores: factor 1—clinical psychological abilities (interviewing, diagnosis, consultation, and treatment) and factor 2—psychological sensitivity (doctor and patient relationship skills, awareness of self, and awareness of patients' reactions to physician).¹³

Procedure

Both Group 1 (Balint) and Group 2 (non-Balint) residents were assessed with paired, repeated measures (matched subject responses, pre and post intervention) using the PMI. Baseline assessments for both groups were made during the week of initiation of Balint training for Group 1 (first week of October of PGY-2) and repeated for both groups, 9 months later, at the end of the PGY-2 training year, during the last week of June.

All assessments were anonymous, with residents marking their rating scale with a personal identification code that only they could identify and match on repeated measure. No identifying information was collected on individual residents, and instruments were filled out in a group setting. This study was reviewed in advance and approved by the University of Wyoming's Institutional Review Board under the heading of curriculum evaluation.

Data Analysis

We computed change scores in PMI for each group over time. This was done by subtracting the pre-score PMI from the post-score PMI for each subject. At this point an independent samples *t* test was conducted on the change scores to see if there was a significant difference between the two groups. We also conducted a Levene's test for equal variance, along with a power calculation on the results. Analysis was performed using SPSS for Windows v11.0[®] (SPSS, Inc, Chicago).

Results

All 14 participants from Group 1 (Balint) and Group 2 (non-Balint) completed this study and the pre and post assessments. Means and standard deviations for each group are shown in Table 1. The result of the independent samples *t* test on the post-pre PMI change scores was significant ($t(12)=2.570, P=.025$). The result of this test indicated that scores in Group 1 (Balint) increased more positively than did scores in Group 2 (Figure 1). Levene's Test for Equality of Variances supported the assumption of equal variances ($F(1,12)=0.073, sig.=0.792$). A calculation of power for this result yielded an observed power of 0.66, indicating that much of the difference between the Group 1 and Group 2 change scores could be attributed to the intervention.

Discussion

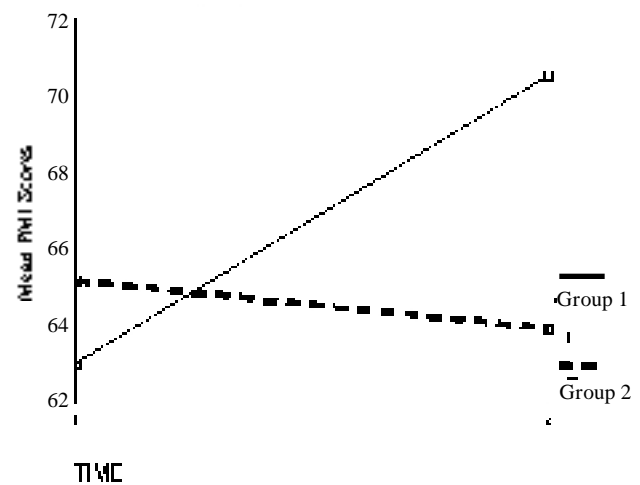
Increasing residents' skills and confidence in dealing with psychosocial and behavioral aspects of medicine is an implied outcome of education in family medicine. Our preliminary research into the effectiveness of Balint group training supports the conclusion that Balint training enhances the levels of residents' behavioral medicine skills, when compared to a standard behavioral medicine curriculum for first- and second-year family medicine residents. Despite the small sample sizes, changes were significant and attributable to the addition of Balint training in Group 1.

Limitations

This study's limitations include the lack of random assignment of the residents to the two training conditions (standard and Balint). However, the two groups of residents were similar in age and in their selection of these particular rural, community-based, university-affiliated programs for their family medicine residency training. The residencies are both part of a single university division and, as such, are subject to the same curriculum review and supervision.

Figure 1

Group by Time PMI Scores



PMI—Psychological Medicine Inventory

The self-report method of assessing changes in resident skills, ability, and confidence is also a limitation of this study. While self-efficacy is important in successful learning and professional development, these self-reported changes need to be verified by external raters and/or measures of behavioral change in patient interactions.

In a study with such small sample sizes and a single ethnic representation, generalization of results is also limited. This study also did not attempt to assess differences in effect by gender of resident, something that also would be worth investigating. Finally, this study was limited to a particular region and focus: rural training in the mountain west. No conclusions are drawn about residents' skills or interests in other regions or

Table 1

Mean Total and Item PMI Scores

	Mean Total Score (SD)	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7	Item 8	Item 9	Item 10	Item 11
Group 1												
Pre	63.0 (6.84)	5.7	4.8	7.0	6.3	4.5	4.8	6.0	5.3	5.3	6.2	7.0
Post	70.5 (10.03)	5.8	6.0	7.5	7.0	5.3	5.7	7.5	6.5	5.5	6.3	7.3
Group 2												
Pre	65.1 (6.47)	4.8	4.9	6.6	6.9	5.8	5.4	6.8	5.8	5.0	6.0	7.4
Post	63.9 (9.76)	4.3	4.5	6.8	6.5	5.3	5.0	6.9	6.1	5.5	6.3	6.9

PMI—Psychological Medicine Inventory

the effectiveness of Balint training in more-urban programs.

Conclusions

As a preliminary investigation, this study provides enough support for the effectiveness of Balint training in enhancing residents' behavioral medicine skills that a larger study appears warranted. Such a study would have to be large enough to include multiple training programs and require that both the behavioral medicine training and the Balint group training be standardized as curricula. While previous researchers have raised doubts about what constitutes Balint training in US residencies, the American Balint Society has now created a credentialing program for faculty leaders to reasonably assure uniformity of training across groups and programs.² With this necessary step, we may now be able to construct larger-scale studies of the effectiveness of this training method for developing more empathic and effective physicians.

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