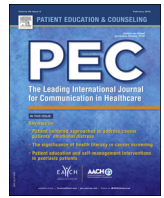




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Review

Research on Balint groups: A literature review

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ABSTRACT

Objective: As the scientific literature on Balint groups (BGs) is scattered, this paper provides an overview of the literature on BGs published in peer-reviewed journals. Study characteristics are analyzed and the principal research topics are discussed.

Methods: ‘Web of Science’ and ‘Pubmed’ databases were searched and all English-language studies on BGs (empirical and non-empirical) were included.

Results: Of the 94 articles included, 35 are empirical studies adopting a qualitative, quantitative or mixed methodology. The research topics that emerged include outcome, characteristics of BG participants, themes addressed in BGs, BG processes, leadership and BG evaluations. The remaining articles were classified as historical articles, reports and reflective articles, for which the main discussion themes are presented.

Conclusion: Research on BGs proves to be diverse, scarce and often methodologically weak. However, indications of the value of BG work were found. Therefore, further research is strongly indicated.

Practice Implications: Points of interest that could to be further considered by BG workers and researchers are for instance long-term BG participation and ‘modified Balint groups’. Recommendations for future research on BGs are provided.

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1. Introduction

In the 1950s, psychoanalyst Michael Balint introduced seminars for general practitioners (GPs) that were later called 'Balint groups' (BGs) [1,2]. These groups were set up in London and spread worldwide, though on a limited scale [3]. In Balint groups, GPs and/or other (para)medical professionals explore difficult interactions with patients through case presentations and discussions. Generally, BGs comprise six to twelve members and one or two leaders. Groups meet on a weekly to monthly basis over several years. In BG meetings, participants present cases that are subsequently commented on by the group members, expressing their thoughts, ideas and emotions. This process can help participants broaden their perspective on the initial difficulty they experienced, and can influence their overall perception of their practice and interactions with patients [4–7].

Activities of BG societies (such as registration of BGs, organization of workshops and conferences) [8] and associated literature demonstrate that BGs are still very much alive. Yet, research on the process and outcome of BGs is relatively scarce and sporadic, and therefore not always easy to find. This might explain why the short introductory literature reviews in some articles mention incomplete and sometimes contradictory findings. Therefore, the present study aims to gather the peer-reviewed literature on BGs in one article and to provide an up-to-date perspective on BG research.

2. Methods

2.1. Search strategy

Using 'Balint group' as a key word, we searched the 'Web of Science' and 'Pubmed' databases for publications up until March 2014. No restriction was set for year of publication. Abstracts were reviewed and all articles addressing BGs as a subject were included. Duplicates, non-English-language articles, meeting abstracts, book reviews, letters and editorials were excluded, as were articles that mentioned BGs only briefly in the context of another research topic. References from each article were checked for further peer-reviewed studies. In order to get a general overview, no further restrictions were imposed.

2.2. Data analysis

After reading through all included articles, we composed a list of variables to be completed for each of the articles. Three broad categories of variables were used: (1) general article information (year of publication, country where research was done); (2) information provided about the BG (the author's relationship to BGs, length and frequency of sessions, group composition, information on leaders, specifications on terminology used, description or definition of BG); (3) type of paper, i.e., 'empirical articles' (using a quantitative, qualitative, or mixed quantitative-qualitative methodology), 'historical-geographical articles', 'reports–anecdotal articles' (with or without case examples), or 'reflective articles'. Each article was critically appraised. Given our purpose of mapping out the range of articles on BGs, all articles were retained. Articles using qualitative data were scored

according to the NICE methodology checklist for qualitative studies [9]. These studies were rated independently by two researchers and disagreements were discussed. Articles failing to meet standards of quality for qualitative research were classified as 'reports–anecdotal articles'. For the quantitative articles, potential remarks with regard to the interpretation of the results are provided below. As a number of the remaining papers (n = 59) provided critical reflections, rich reports on personal experiences, or instructive information about the context of BGs that may be of interest for future research, these papers were also included in this review. Finally, for each article, the topic, topic variables and results or findings were summarized. As the overall body of empirical literature was too diverse to make any meaningful quantitative synthesis, we chose to qualitatively synthesize the article topics and to present the results of the articles in a schematic way.

3. Results

In Fig. 1, the numbers of articles included and excluded throughout the search process are presented. The database search yielded 362 articles. Screening the abstracts led to the exclusion of 32 articles that were not related to BGs. After excluding duplicates (n = 60), non-English-language articles (n = 149), meeting abstracts, book reviews, letters and editorials (n = 24), the number of included articles scaled down to 97. Hand searches and bibliographic reviews yielded an additional 22 papers. Finally, 25 papers were excluded since they only marginally mentioned BGs. This resulted in a total of 94 articles included in this study.

3.1. Methodology of empirical articles

Of the 94 included articles, 35 (=37%) were empirical papers. Among these articles, 21 used a quantitative methodology, 10 used a qualitative methodology, and four applied a mixed quantitative-qualitative methodology. Almost all quantitative studies made use of self-report questionnaires, measuring for instance work satisfaction, burnout, attitudes, empathy, personality, psychosocial self-efficacy and BG evaluation (see Table 1). In the qualitative studies, researchers mainly used semi-structured interviews, field notes, video-taped sessions, audio-taped sessions (with or without transcriptions) and open questionnaires (see Table 2).

3.2. Variability in Balint group setting

Although BGs were initially set up for GPs, some papers address BGs for other professionals. These include BGs for nurses [10–13], 'industrial physicians' [14], specialists [15], physiotherapists [16] and community health workers [17]. A relatively high number of papers report on BGs for medical residents [5,18–27], medical fellows [28] or medical students [29–34], working in family medicine [5,21,23–27,29], obstetrics and gynecology [18,22], psychiatry [4,31,32] or oncology [19,28] departments. In some countries (mostly US) a limited time of BG participation (often 6 months) is mandatory for residents [4,5,21–23,35,36]. Some BGs are mixed, welcoming professionals from various backgrounds, such as GPs, medical specialists and/or counselors [4,37,38]. Generally, BG participants do not cooperate with each other in their everyday work, yet some BGs are organized for professionals

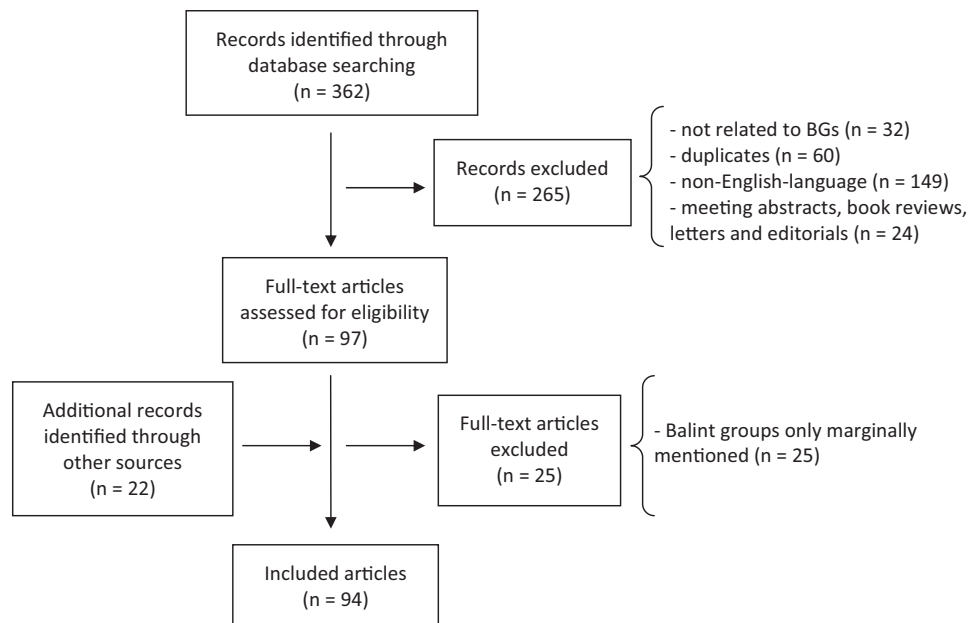


Fig. 1. Flow of the literature through the review.

working in the same unit [13,38–41]. Reports on other types of ‘modified Balint groups’ indicate the use of different proceedings, such as case preparation [19], presenting cases in rotation [4,42], taking the most recent consultation as a case [17], working on questions [10], position related difficulties [14] and professional role conflict [28], giving homework assignments [43], combining meetings with theoretical teaching [4,44], rotating leadership [42], or modifying the BG according to a mindfulness technique [45]. Some modified BGs have different focuses such as a family systems approach [37], cognitive therapy [43] or an additional focus on diagnostics [38,40]. Often these modified groups have different names such as ‘Balint-style group’, ‘Balint clinical reflection group’ or ‘Balint-like group’. Generally, the number of participants in a BG is between 6 and 12, with extremes of 4 [34] to 15 [19,24,46] and 17 participants [47]. Meeting frequency is often once per week or once every fortnight, sometimes once per month. Meetings generally last between one and two hours over a period of one or two years. However, the period of group meetings is variable, ranging from approximately 6 to 12 weeks [4,32,34,43,48] up to 12 [38] and 17 years [49].

3.3. Article topics

In this section, we briefly discuss the main findings of the empirical articles and the chief topics addressed in the other papers. Specific information on the study designs is provided in Tables 1 and 2. Due to space limitations, only summaries of the findings are presented; for more information we refer to the articles themselves.

3.3.1. Outcome – effects of Balint group participation

Several quantitative and qualitative studies reported on outcome or effects of BG participation. Quantitative studies categorized under this topic have a research design of minimally two assessment moments. Results on item level are not presented here. The following outcome variables of BG participation were addressed:

Psychosocial self-efficacy [11,12,18,22,27,50]. All six articles addressing this topic made use of the Psychological Medicine

Inventory (PMI). Three studies [11,12,27] found an increase in psychosocial self-efficacy while the other three [18,22,50] reported no significant increase. Rabinowitz [11,12] reported significant changes only after long-term participation (i.e., 10 to 12 months) but not after short-term participation (i.e., 6 months).

Burnout/satisfaction [12,19,22,45]. Using the Maslach Burnout Inventory (MBI), one study [22] found no significant effect on burnout and a second [19] failed to report on statistical tests and therefore remained inconclusive. A third study [12] using two other burnout questionnaires found a significant decrease in burnout levels after 10 months of participation, but not after 6 months. A fourth study [45] did not find any significant effect of BG participation on subjective satisfaction.

Attitudes [18,22,28,43,45,51,52]. Seven articles made use of various questionnaires focusing on different aspects of participants’ attitudes. Brock and Stock [51] presented leaders’ perceptions of attitudes or skills that are attainable through BG seminars; Dokter, Duivenvoorden and Verhage [52] reported individual changes in perception of patients but did not report on statistical tests; Adams et al. [18] found no significant effect of BG participation on professionalism; Ghetti et al. [22] found unchanged scores in participants’ empathy; Sekeres et al. [28] reported no significant effect on participant’s overall attitudes (only in domain “view of oneself as a physician”) and Abeni et al. [45] reported a general maturation in participants’ defense mechanisms; finally, Hartmann’s [43] pilot study of participants’ attitudes towards somatizing patients showed no significant overall change.

Specific expertise/knowledge [44,47,50]. Amiel et al. [47] found no effect of BG participation on breaking bad news; Rabin et al. [50] reported increased self-efficacy cognitions related to the treatment of drug addicts, although significant at final assessment only (=30 months); finally, a third study [44] was inconclusive on the effect on knowledge of pharmacotherapy and psychotherapy of anxiety.

Besides quantitative measures of pre-defined outcome variables, a number of qualitative studies investigated the effects of BG participation. One pilot study [53] outlined two criteria for defining the type of change that BG participation might induce: ‘knowledge of one’s own limits’ and ‘minimal interference of one’s

Table 1
Overview of included quantitative papers.

Article	Instruments	Assessment moments	Participants (+control) modified BG	Time in BG ^a	Topic + variables	Results (remarks)
Quantitative papers						
Abeni et al. [45]	REM-71 + SAT-P + GCQ	2	30 (8 Caregivers + 10 physicians + 12 nurses) modified BG	30 h (?–1 hr–30 sessions)	Outcome: defense mechanisms, subjective satisfaction; process	Outcome: maturation of defenses, no effect on subjective satisfaction; process: group climate: ↑ engagement + ↓ conflict (only in group of caregivers)
Adams et al. [18]	PMI + Musick 360-degree evaluation (only professionalism items) ^b	2	7 Residents (+6 control)	? (1x/2wks–?–6 months)	Outcome: psychological medicine skills; professionalism	No effect on psychosocial self-efficacy; no effect on professionalism
Amiel et al. [47]	2 questionnaires (7 + 3 à 4 items) evaluating OSCE (8 cases) ^b	2	17 GPs (+17 control) BG = control	21 h (?–1,5 h–14 sessions)	Outcome: breaking bad news (BBN)	No effect on BBN
Bar-Sela et al. [19]	MBI + expectations questionnaire	2	15 Residents (8 jr.–7 sr. residents comparison) modified BG	18 h (1x/month–1,5 h–1 yr)	Outcome: burnout; evaluation: topics + group contribution	Inconclusive (no significance tests); no effect on expected group contribution
Cataldo et al. [21]	JSPE + Work Satisfaction Survey (3 items)	1	74 GPs (+40 control = 6 month mandatory part.)	104 h (1x/wk–1 hr–2 yrs)	Part. characteristics: empathy; work satisfaction	No ↓ in empathy; no ↓ in work satisfaction between 'attendees' and 'non-attendees'
Dokter et al. [52]	Questionnaire (own design): demographic–'Balint characteristics'–personality characteristics–Leary's interaction rose	3	22 GPs (↓ to–14 and 8 GPs) (+22 control)	78 h (1x/2wks–1,5 h–2 yrs)	Outcome: attitude, patient perception; part. characteristics: attitude, personality, patient perception	Complex results represented on individual level (e.g. perceiving patients differently) (no statistical tests)
Ghetti et al. [22]	MBI + PMI + JSPE	2	17 Residents	12 h (1x/month–1 hr–1 yr)	Outcome: burnout; psychological medicine skills; empathy	No effect on burnout; no effect on psychosocial self-efficacy; no effect on empathy
Hartmann [43]	Attitude questionnaire (own design; 10 items)	2	4 GPs (+4 control) modified BG	19,5 h (1x/wk–1,5 h–13 sessions)	Outcome: attitudes	(Results only on item level)
Johnson et al. [23]	MBTI + Rokeach score + WEPS + IE + FIRO-B + POI	1	132 Residents (+74 control = 6 month mandatory part.)	104 h (1x/week–1 hr–2 yrs)	Part. characteristics: personality	Proportion 'non-attendees' = 35%; 'non-attendees' less intuitive than 'attendees'
Joukamaa et al. [56]	Patients: SCL-25; GPs: assessment scale of patient's mental health	1	10 GPs (+2 control)	?	Part. characteristics	BG part.: lower ability to detect patients' mental disorders (control group n = 2)
Kjeldmand et al. [55]	Questionnaire (own design; 49 items)	1	20 GPs (5 BG < 1,5 yrs; 12 BG > 1,5 yrs) (+21 control)	? part. from diff groups	Part. characteristics: workload; control; satisfaction; quality of work; co-operation; training; health; attitudes to psychosomatic patients	Experienced BG part.: overall higher scores (except for 'workload')
Parker and Leggett [31]	2 evaluation questionnaires (own design; 5 + 6 items)	1	20 students	6 à 8 h (1x/wk–1 hr–6 à 8 wks)	Evaluation BG	Sessions rated positive; contribution of BG participation to educational needs rated medium (only descriptive statistics)
Rabin et al. [50]	PMI + questionnaire on drug treatment self-efficacy (own design; 2 items)	4	22 Physicians	144 h (1x/2 wks–2 h–2,5 yrs)	Outcome: psychological medicine skills; drug-treatment self-efficacy	No effect on psychosocial self-efficacy; ↑ in self-efficacy cognitions related to the treatment of drug addicts
Rabinowitz et al. [11]	PMI + part. listing important mental health topics	3	13 Nurses	48 h (1x/2wks–2 h–1 yr)	Outcome: psychological medicine skills; psychosocial repertoire	↑ In psychosocial self-efficacy (long-term but not short-term); no effect on psychosocial repertoire

Table 1 (Continued)

Article	Instruments	Assessment moments	Participants (+control) modified BG	Time in BG ^a	Topic + variables	Results (remarks)
Rabinowitz et al. [12]	PMI + burnout questionnaire (Shirom + Melamed)	3	10 Nurses	40 h (1x/2wks–2 h–10 months)	Outcome: psychological medicine skills; burnout	↑ In psychosocial self-efficacy; ↓ burnout (long-term but not short-term)
Sekeres et al. [28]	Attitudes questionnaire (<i>own design</i> ; 32 items) + evaluation questionnaire (<i>own design</i> ; 21 items)	3	28 Fellows modified BG	18 h (1x/2wks–1,5 à 2 h–6 months (=10 sessions))	Outcome: attitudes; evaluation BG	Outcome: no effect on attitudes (only in domain “view of oneself as a physician”); evaluation: safe group, decompress, social activity (Results mainly comparing GPs & specialists in primary care)
Stojanovic-Spehar et al. [44]	Questionnaire on knowledge of pharmacotherapy (<i>own design</i> ; 5 items) and use of psychotherapy (<i>own design</i> ; 3 items)	2	111 GPs & specialists in primary care modified BG	? (4 weekends)	Outcome	
Turner and Malm [27]	PMI	2	6 Residents (+8 control)	18 h (1x/2wks–1 hr–9 months)	Outcome: psychological medicine skills	↑ In psychosocial self-efficacy
von Klitzing [13]	Session transcriptions (word counts) ^b	1	7 Nurses	? (?–1,5 h–1 yr)	Process: verbal + reflective activity; themes	Preference to discuss terminally ill, female patients of same age; ↑ verbal activity participants; ↑ reflection on patient; ↓ reflection on self
Quantitative parts in mixed method papers						
Musham and Brock [5]	MBTI	1	16 Residents (9 freq vs 7 infreq attenders)	? (1x/wk–1 hr–?)	Part. characteristics: personality	Inconclusive (no significance tests)
Parker and Leggett [32]	2 evaluation questionnaires (<i>own design</i> ; 5 + 6 items)	1	42 Students	6 à 8 h (?–1 hr–6 à 8 wks)	Evaluation BG	Tendency to positive group ratings (only descriptive statistics)
Historical papers						
Brock and Stock [51]	Questionnaire (<i>own design</i>)	n/a	354 Family practice residency directors	n/a	Facts BG; leadership; process; themes; objectives; outcome; attitudes	Detailed results (not possible to present them here)
Johnson et al. [35]	Questionnaire (<i>own design</i>)	n/a	298 Family practice residency directors	n/a	Facts BG; leadership; objectives	Detailed results (not possible to present them here)

Abbreviations: BG: Balint group; part.: participants; REM-71: Response Evaluation Measures-71; SAT-P: Satisfaction Profile; GCQ: Group Climate Questionnaire–short version; OSCE: objective structured clinical examination; MBI: Maslach Burnout Inventory; PMI: Psychological Medicine Inventory; JSPE: Jefferson Scale of Physician Empathy; MBTI: Myers-Briggs Inventory; WEPS: Work Environmental Preference Schedule; IE: Rotter's Internal-External Locus of Control; FIRO-B: Schutz's Fundamental Interpersonal Relationship Orientation Behavior Test; POI: Personal Orientation Inventory.

^a Time in BG: approximate number of hours calculated by multiplying mentioned session frequency (x/week or x/month), session length (hours) and overall duration of Balint group (weeks, months or years) (possible holiday breaks could not be taken into account, thus for the longer lasting groups the calculated numbers may be slightly overestimated).

^b If instrument is not self-report.

own psychopathology'. Four studies [4–6,16] used semi-structured interviews to describe participants' perception of the effect of BG participation. Among the effects we found: understanding case dynamics, awareness of one's own and patients' feelings, using a new perspective/conceptual framework [4], competence in the physician-patient encounter, recognizing different aspects of professional identity [6], increased self-awareness and interacting with patients differently [5,16]. Finally, Samuel [54] observed individual changes in some participants' approach towards the group and their patients, as well as a maturation of their defenses.

3.3.2. Characteristics of Balint group participants

Five quantitative studies [5,23,52,55,56] compared characteristics of BG participants and professionals with no or only limited experience with BGs. Dokter et al. [52] compared 'Balint

characteristics', personality traits and perceptions of patients in a group of Balint participants and a control group, but failed to report on statistical tests. Comparing a group of residents participating in a BG for two years (labeled 'attendees') with residents who left after the obligatory 6 month participation (labeled 'non-attendees'), Cataldo et al. [21] found no significant differences in empathy or overall work satisfaction. Moreover, Johnson et al. [23] found that their group of 'non-attendees' was less intuitive. Kjeldmand et al. [55] found that experienced BG participants (>1,5 years) had significantly higher scores on self-reported control, satisfaction, quality of work, co-operation, training, health and attitudes towards psychosomatic patients than GPs with no BG experience. Finally, although relying on a very small sample, Joukamaa, Lehtinen and Karlsson [56] noticed that BG participants showed lower ability to detect patients' mental disorders than non-BG-participants.

Table 2
Overview of included qualitative papers.

Article	Data + participants	Analysis	Time in BG ^a	Topics	Findings
Qualitative papers					
Brock and Johnson [96]	Process notes of 66 BG sessions with GPs	<i>Description</i>	? (1x/wk–?–?)	BG as research method	Typology of 5 potential harmful GP roles: description + example
Dahlgren et al. [16]	Semi-structured interviews with 3 BG part. (physiotherapists)	Interpretative phenomenological approach (metaphors)	? (1x/month–?–18 months)	Process; effects	8 process elements grouped into 4 phases (e.g. expression of difficulties, meeting other perspectives, applying insights to practice)
Graham et al. [4]	Semi-structured interviews with 17 BG part. (psychiatry residents and counselors)	<i>Description</i>	16 h (1x/wk–1/4 h–12 wks)	Evaluation; process; effects	Evaluation: groups were anxiety provoking; process: e.g. group container, self-reflection; effects: e.g. understanding case dynamics, awareness of own and patient's feelings, new perspective/ conceptual framework
Kjeldmand and Holmström [6]	Semi-structured interviews with 9 BG part. (GPs)	Phenomenological analysis	? (part. from diff groups)	Process; effects	Process: sense of security, parallel process, endurance & satisfaction; effects: competence in the physician-patient encounter, recognizing different aspects of professional identity
Kjeldmand and Holmström [60]	Semi-structured interviews with 8 BG leaders	Systematic text-condensation method	? (part. from diff groups)	Leadership; process	3 categories of difficulties in BGs: (1) related to individual member, (2) related to group/leader, (3) related to group surroundings
Merenstein and Chillag [36]	Observation of 14 BG sessions (field notes); interviews with 10 BG leaders; 7 focusgroups with BG part.	Editing style	? (part. from diff groups)	Leadership	Comparison of different BGs in terms of format, themes discussed, dynamics, leadership
Pinder et al. [61]	Observation of 6 BG & 2 non-BG meetings (field notes; interviews with 13 BG part. (GPs - registrars); discussion with leaders)	Ethnographic approach/case studies	? (part. from diff groups)	Process; evaluation	Process: group dynamics; evaluation: positive and negative experiences
Samuel [54]	Tape records; leader's notes; report by 11 BG part. (pre: expectations; post: evaluation, change of others); group attitude questionnaire by 11 BG part. (pre + post)	<i>Description</i>	90 h (1x/2wks–1,5 h–2,5 yrs)	Themes; process; effects	Themes: often personal themes; process: identification with cases, use of group for immediate help in daily work; effects: maturation of defenses, some change in attitudes towards group and patients, little sensitivity towards other members' change
Torppa et al. [34]	Leaders' notes on 2 BGs (medical students)	Grounded theory	15 and 7,5 h (1x/2wks and 1x/wk–1,5 h–10 and 5 sessions)	Themes	Themes: e.g. feelings related to patients, building professional identity, negative role models, cooperation with other medical professionals
Van Roy et al. [7]	Observation notes; tape records + transcripts of 2 case discussions in 2 BGs (GPs + mixed)	<i>Description</i>	? (part. from diff groups)	Process	Characterisation of change in participants in 2 case discussions
Qualitative parts in mixed method papers					
Musham and Brock [5]	Semi-structured interviews with 16 BG part. (residents)	<i>Not mentioned</i>	>24 h (1x/wk–1 hr– >6 months)	Evaluation; effects	Evaluation: little initial understanding of BGs, reasons for infrequent attendance; effects: heightened self-awareness, interacting with patients differently
Parker and Leggett [32]	Unstructured written feedback from 16 BG part. (medical students)	Thematic analysis–grounded theory	6 à 8 h (?–1 hr–6 à 8 wks)	Evaluation	Reflections on value of BG, limitations in relevance for students, advice for adaptation
Qualitative and quantitative parts not separable					
Bacal [53]	Qual: interviews with 12 BG part. (GPs)(=post) (+ 12 control (=pre)); quant: ratings	Qual: not mentioned + quant: Kendall's correlation	? (part. from diff groups)	Outcome: defining change (pilot study)	Criteria for change: knowledge of own limits + minimal interference of own psychopathology
Johnson et al. [62]	Qual: open evaluation forms + focus groups with 21 BG leaders; quant: evaluation forms	Qual: grounded hermeneutic editing approach + quant: PCA	? (part. from diff groups)	Leadership	5 essential leadership skills: creating safe climate of safety, guarding over group norms, encouraging group movement, understanding group process, personality/ style of leader

Abbreviations: BG part.: Balint group participants; PCA: principal component analysis.

^a Time in BG: approximate number of hours calculated by multiplying mentioned session frequency (x/week or x/month), session length (hours) and overall duration of Balint group (weeks, months or years) (possible holiday breaks could not be taken into account, thus for the longer lasting groups the calculated numbers may be slightly overestimated).

3.3.3. Themes addressed in Balint groups

Several studies reported on the themes that were addressed during BG sessions. Nevertheless, Torppa et al. [34] were the only authors to present a systematic overview of the themes addressed in (student) BGs, which are illustrated with examples. The majority of papers provide only a brief non-systematic selection of the themes that were addressed [11,13,15,19,25,28,36,37,43,48,57–59]. Brock and Stock [51] provide an overview of the frequency with which specific themes are addressed in BGs. As general trends, Samuel [54] observed that themes often represented a personal involvement with particular kinds of problems, and von Klitzing [13] observed a tendency for participants to present terminally ill patients that were similar to themselves with regard to gender and age.

3.3.4. Balint group processes

Seven qualitative articles [4,6,7,16,54,60,61] studied the process of BG meetings or BG participation (i.e. how BG participation leads to change). Dahlgren et al. [16] investigated participants' descriptions of the BG process and deduced eight elements grouped into four phases (e.g. expression of difficulties, meeting other perspectives, applying insights to practice). Graham et al. [4] described pathways through which change in BG participants occurred, pointing at aspects such as the group's container function or self-reflection. Kjeldmand and Holmström [6] indicated parallel processes, a sense of security, and the recognition of participants' professional identity as some of the group processes at work. Samuel [54] noted that participants often identified with each other and their patients in the case discussions, and that they often used the group for immediate help in their daily work. Pinder et al. [61] pointed out helpful as well as limitative group dynamics by making use of detailed case examples. Kjeldmand and Holmström [60] indicated potentially negative group processes such as scapegoating. Reading BG work from a Lacanian theoretical framework, Van Roy et al. [7] described two participants' process of change over one session. Furthermore, two quantitative studies [13,45] investigated BG processes. Over the course of several sessions, Abeni et al. [45] found increased group engagement and decreased group conflict, but this was only the case in a group of caregivers. Finally, using word counts in session transcripts, von Klitzing [13] observed that participants' verbal activity and reflections about their patients increased, whereas reflection about themselves decreased over the sessions.

3.3.5. Leadership in Balint groups

Five articles focused on various aspects of BG leadership by making use of either a qualitative methodology [36,60], a mixed qualitative-quantitative methodology [62] or a quantitative methodology [35,51]. Kjeldmand and Holmström [60] focused on leaders' experiences of difficulties in their groups, while Johnson et al. [62] extracted five essential leadership skills from BG leaders' evaluation forms and focus groups (creating a safe climate, guarding over group norms, encouraging group movement, understanding the group process, personality/style of leader). Relying principally on observations of several BGs, Merenstein and Chillag [36] discussed several leadership-related issues, e.g. personality of leaders, degree of hierarchy and degree of control. Brock and Stock [51] quantitatively investigated leaders' perceptions of group objectives, format, issues, attitudes or skills attainable through BG participation and leaders' professional backgrounds. Group objectives and leaders' professional backgrounds were later reassessed by Johnson et al. [35], who also included data on leaders' training.

3.3.6. Evaluation of Balint groups

Several papers focused on participants' evaluation of their participation in a BG by using qualitative interviews [4,5,61], qualitative written reports [32] or quantitative questionnaires [19,28,31,32]. Some described rather positive group evaluations. For instance, Sekeres et al. [28] reported that the residents evaluated the groups as safe, as an opportunity to decompress, and as a social outlet. Other authors outlined participants' negative experiences, especially in mandatory groups: Graham et al. [4] reported that residents participating in a BG experienced the groups as anxiety provoking and that some struggled to adapt to the learning process. Similarly, Musham and Brock [5] observed that residents initially poorly understood the purpose of the groups; moreover, participants indicated factors such as time, discomfort and not being convinced of the relevance of BG work to their clinical work as reasons for infrequent attendance [5]. Finally, some papers reported mixed findings. Although somewhat tentatively, Parker and Leggett [31,32] mentioned participants' rather positive evaluation of individual group sessions, whereas participants were more hesitant about the relevance of the groups to their clinical practice. Pinder et al. [61] provided detailed group evaluations (including both positive and negative aspects) by interviewing the presenters after the group meetings.

3.3.7. Historical-geographical articles

Two studies presented a number of facts about US BGs. Brock and Stock [51] conducted a survey study offering data about existence, leadership, meeting frequency, objectives and composition of BGs in US family practice residencies, with a follow up study ten years later in 2000 [35]. Other, non-empirical articles provide historical information about the introduction of BGs (the initial groups by Michael Balint as well as other groups) and about Balint societies [2,3,15,49,63–68].

3.3.8. Reports – anecdotal articles

A large part of the non-empirical papers are reports about BGs. Frequently, they describe (co-)leaders' or participants' BG experiences. They often comprise detailed information about BG meetings (e.g. [17,42]), initiatives of setting up BGs (e.g. [66]), difficulties encountered (e.g. [39]), issues addressed (see 3.3.3), interventions applied (e.g. [26,48]), instruments used (e.g. 'initial interview card' [69], a group's evolution (e.g. [15,20,24,25,39] or group evaluations (e.g. [14,18,25,29,30,70])). Sometimes the reports describe specificities of BGs for special target groups or specificities about 'modified Balint groups' (see Section 3.2). Some papers also offer case examples, which are further analyzed in the paper (e.g. [14,17,24,38,40,41,69,71–76]), either serve as a mere illustration (e.g. [29,57,77]). One paper consisted of an excerpt of a transcript of a BG meeting [78].

3.3.9. Reflective articles

In a substantial number of the non-empirical papers, the authors reflect on diverse BG related topics. The depth of reflection varies: some articles mainly present different aspects of what BG work is, whereas others provide a critical reflection about specific Balint-related issues. The most frequently discussed topics include: the need for Balint training, the place for such training in (continuing) medical education (e.g. [71,77,79,80]), the role of mandatory groups (e.g. [81]) and the future of BGs (e.g. [49]). Several papers focus on the specificity of BGs (e.g. [82–86]), comparing them to other forms of group discussions (e.g. [87–89]), discussing the possibility of BGs for other professions (e.g. [74]) or the necessity to adapt BGs to the participants' needs (e.g. [26,58]). Some authors reflect on the change that BG participation might facilitate (e.g. [69,77,90]) or on leadership issues (e.g. [33,41,66,74,85,91,92]). In certain papers, the authors use

theoretical concepts as a framework for understanding BG processes [72,86,91,93,94]).

3.3.10. Balint group observation as research data

Michael Balint introduced his seminars (later called 'Balint groups') as 'training-cum-research' groups [82]. This means that these seminars not only aimed to 'train' GPs, but also to investigate, as a group, aspects of general practice. In line with this last aim, some papers discuss the use of BGs as a research method [69,71,84,95]. Some studies actually used BG observations as research data to study for instance GPs' defenses [54,96]) or the phenomenon of 'third party in general practice consultations' [46]. Bourne and Lewis [64] reflected upon the involvement of BGs in such research projects. The scientific value of BGs was questioned by Sowersby [97].

4. Discussion and conclusions

4.1. Discussion

The main aim of the present study was to provide an overview of the peer-reviewed articles on Balint groups. We included empirical ($n = 35$) as well as non-empirical ($n = 59$) papers. We reviewed the variations in BG setting, diverse outcome variables (such as psychosocial self-efficacy, burnout and change in attitudes), participants' characteristics, themes, processes, leadership issues, group evaluations, historical information and the main topics addressed in reports and reflective articles. As we demonstrated, Balint group research includes very diverse research topics, with low numbers of studies focusing on the same topic. Moreover, several articles appeared to be methodologically weak. With regard to the quantitative studies, these shortcomings include the use of (too) small samples, the omission of a control group, the lack of information about the reliability and validity of the instruments used, the incorrect use of statistics (e.g. providing no information on the significance of results) or the misleading presentation of the results (e.g. in the abstract or title); for the qualitative studies, the shortcomings concern for instance a lack of systematic approach or information about the data-analysis. However, despite these shortcomings, we found indications of the value BGs may still have today. This became evident from some qualitative studies on BG effects and participants' evaluations as well as from personal reports and reflective articles. In order to gain more insight into this value and into aspects of potential improvement of BG work, more solid and systematic findings are needed.

4.2. Limitations

There are limitations to this literature review. As mentioned above, only English-language articles were included, though a large number of articles in other languages are available. Reviewing these articles and contrasting them with the current study surely could be worthwhile. Moreover, books (e.g. [1,98,99]), conference proceedings and articles in national Balint society journals were not taken into account, although they may contain interesting views. Finally, given the occasionally flexible distinction between what is a BG and what not, papers using different names for their groups may have been overlooked.

4.3. Practice implications

This review study highlights specific points of interest for both professionals involved in BG work and (future) BG researchers. First, since some papers reported effects (e.g. psychosocial self-efficacy, burnout) only after long-term BG participation

[11,12,55]), BGs should be organized for a sufficient length of time (1 or 1.5 year at least) to allow for change. Next, the topic 'modified Balint groups' was addressed in various papers, indicating that this is an issue that is alive among BG professionals. This applies for instance to BGs for students/residents who may have particular needs (e.g. [26,31]). This leads to the broader issue of what the core of BG work is and what may be fruitful adaptations. In order to allow for meaningful comparison and discussions on this topic, articles should supply information about proceedings, goals, group composition, leaders' profession and authors' relationship to the BG. Further considerations for researchers include setting up well-considered study designs. This implies for instance learning from the findings and shortcomings of previous studies; this task could be facilitated by the present study. As already noted, defining and selecting appropriate (outcome) variables is an important and difficult question to address. Grasping the core of BG work and defining the 'limited but considerable change' as referred to by Michael Balint [1] appears to be a tough but necessary task. In this respect, we argue that well-designed qualitative studies are needed, as they allow for a more explorative focus. Moreover, qualitative studies may counter the difficulty of finding sufficient numbers of participants, which is often not evident due to the low number of Balint groups. For instance, studies investigating BG participants' experiences through a critical incident technique [100] could shed light on crucial aspects of BG work and potential effects of BG participation. Valid research findings may not only help BG workers to enhance their practice, they could also help policy makers to make more informed and appropriate decisions.

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References

- [1] Balint M. *The doctor, his patient and the illness*. London: Pitman Medical; 1964.
- [2] Horder J. The first Balint group. *Brit J Gen Pract* 2001;51:1038–9.
- [3] Salinsky J. The Balint movement worldwide: present state and future outlook: a brief history of Balint around the world. *Am J Psychoanal* 2002;62:327–35.
- [4] Graham S, Gask L, Swift G, Evans M. Balint-style case discussion groups in psychiatric training: an evaluation. *Acad Psychiatry* 2009;33:198–203.
- [5] Musham C, Brock CD. Family practice residents' perspectives on Balint group training: in-depth interviews with frequent and infrequent attenders. *Fam Med* 1994;26:382–6.
- [6] Kjeldmand D, Holmstroem I. Balint groups as a means to increase job satisfaction and prevent burnout among general practitioners. *Ann Fam Med* 2008;6:138–45.
- [7] Van Roy K, Vanheule S, Debaere V, Inslegers R, Meganck R, Deganck J. A Lacanian view on Balint group meetings: a qualitative analysis of two case presentations. *BMC Fam Pract* 2014;15.
- [8] Balint International. (<http://www.balintinternational.com/>).
- [9] NICE. (<http://publications.nice.org.uk/the-guidelines-manual-appendices-bi-pmg6b/appendix-h-methodology-checklist-qualitative-studies>); 2007.
- [10] Paal J. Suicide prophylaxis within a Balint-group with staff of an intensive nursing station in a general hospital. *Isr Ann Psychiatr Relat Discip* 1978;16:46–9.
- [11] Rabinowitz S, Kushnir T, Ribak J. Developing psychosocial mindedness and sensitivity to mental-health issues among primary-care nurses using the Balint group method. *Isr J Psychiatry Relat Sci* 1994;31:280–6.
- [12] Rabinowitz S, Kushnir T, Ribak J. Preventing burnout: increasing professional self efficacy in primary care nurses in a Balint Group. *AAOHN J* 1996;44:28–32.
- [13] von Klitzing W. Evaluation of reflective learning in a psychodynamic group of nurses caring for terminally ill patients. *J Adv Nurs* 1999;30:1213–21.
- [14] Chertok LG, Bourguignon O. The Balint group and preventive industrial medicine. *Psychiatry Med* 1972;3:395–402.

- [15] Selvini A. An internist's experience in a doctor-patient relationship training group (Balint group). *Psychother Psychosom* 1973;22:1–18.
- [16] Dahlgren MA, Almqvist A, Krook J. Physiotherapists in Balint group training. *Physiother Res Int* 2000;5:85–95.
- [17] Leggett A. Transcultural issues in the dynamics of a Balint clinical reflection group for community mental health workers. *Transcult Psychiatry* 2012;49:366–76.
- [18] Adams KE, O'Reilly M, Romm J, James K. Effect of Balint training on resident professionalism. *Am J Obstet Gynecol* 2006;195:1431–7.
- [19] Bar-Sela G, Lulav-Grinwald D, Mitnik I. Balint group meetings for oncology residents as a tool to improve therapeutic communication skills and reduce burnout level. *J Cancer Educ* 2012;27:786–9.
- [20] Brock CD. Gearing balint group leadership to resident professional development. *Fam Med* 1990;22:320–1.
- [21] Cataldo KP, Peeden K, Geesey ME, Dickerson L. Association between Balint training and physician empathy and work satisfaction. *Fam Med* 2005;37:328–31.
- [22] Ghetti C, Chang J, Gosman G. Burnout, psychological skills, and empathy: balint training in obstetrics and gynecology residents. *J Grad Med Educ* 2009;1:231–5.
- [23] Johnson AH, Brock CD, Hueston WJ. Resident physicians who continue Balint training: a longitudinal study 1982–1999. *Fam Med* 2003;35:428–33.
- [24] More ES. Empathy as a hermeneutic practice. *Theor Med* 1996;17:243–54.
- [25] Smith M, Anandarajah G. Mutiny on the balint: balancing resident developmental needs with the Balint process. *Fam Med* 2007;39:495–7.
- [26] Stein HF. Physician Balint groups as an organizational laboratory of psychohistory – an exploration in historical repetition and transcendence. *J Psychohist* 2003;30:226–53.
- [27] Turner AL, Malm RL. A preliminary investigation of Balint and non-Balint behavioral medicine training. *Fam Med* 2004;36:114–7.
- [28] Sekeres MA, Chernoff M, Lynch Jr TJ, Kasendorf EI, Lasser DH, Greenberg DB. The impact of a physician awareness group and the first year of training on hematology-oncology fellows. *J Clin Oncol* 2003;21:3676–82.
- [29] Levenstein S. An undergraduate Balint group in Cape Town. *S Afr Med J* 1981;59:642–3.
- [30] Levenstein S. An undergraduate Balint group in Cape Town—a follow-up report. *S Afr Med J* 1982;62:89–90.
- [31] Parker S, Leggett A. Teaching the clinical encounter in psychiatry: a trial of Balint groups for medical students. *Australas Psychiatry* 2012;20:343–7.
- [32] Parker S, Leggett A. Reflecting on our practice: an evaluation of Balint groups for medical students in psychiatry. *Australas Psychiatry* 2014;22:190–4.
- [33] Stephanos S, Auhagen U. Reflections on the qualities of a Balint group leader. *Brit J Med Psychol* 1979;52:43–7.
- [34] Torppa MA, Makkonen E, Martenson C, Pitkala KH. A qualitative analysis of student Balint groups in medical education: contexts and triggers of case presentations and discussion themes. *Patient Educ Couns* 2008;72:5–11.
- [35] Johnson AH, Brock CD, Hamadeh G, Stock R. The current status of Balint groups in US family practice residencies: a 10-year follow-up study, 1990–2000. *Fam Med* 2001;33:672–7.
- [36] Merenstein JH, Chillag K. Balint seminar leaders: what do they do. *Fam Med* 1999;31:182–6.
- [37] Botelho RJ, McDaniel SH, Jones JE. Using a family systems approach in a Balint-style group: an innovative course for continuing medical education. *Fam Med* 1990;22:293–5.
- [38] Keinanen M. Cooperation between mental health professionals and doctors in a Balint-oriented supervision group. *Israel J Psychiat* 2001;38:95–101.
- [39] Drees A. The establishment of a Balint group among the nurses on a psychosomatic ward. *Med Law* 1983;2:69–75.
- [40] Smith MF, Litts WC, Robbiano L, Hoin JJ, Nathan RG, Bont EM. Using a Balint-like group for geriatric education in a nursing-home setting. *Educ Gerontol* 1993;19:597–606.
- [41] Rabin S, Maoz B, Shorer Y, Matalon A. Balint groups as 'shared care' in the area of mental health in primary medicine. *Ment Health Fam Med* 2009;6:139–43.
- [42] Pettitt GA. The Nelson Balint group: evolution of one possible method for continuing postgraduate education and constructive peer-review in smaller centers. *New Zeal Med J* 1981;93:45–6.
- [43] Hartmann PM. A pilot study of a modified Balint group using cognitive approaches to physician attitudes about somatoform disorder patients. *Int J Psychosom* 1989;36:86–9.
- [44] Stojanovic-Spehar S, Blazekovic-Milakovic S, Matanic D. Education about pharmacotherapy and psychotherapy of anxiety among primary care physicians in Croatia: Balint group approach. *Croat Med J* 2004;45:625–9.
- [45] Abeni MS, Magni M, Conte M, Mangiacavalli S, Pochintesta L, Vicenzi G, et al. Psychological care of caregivers, nurses and physicians: a study of a new approach. *Cancer Med* 2013;3:101–10.
- [46] Granek M, Weingarten M. The third party in general practice consultations. *Scand J Prim Health Care* 1996;14:66–70.
- [47] Amiel GE, Ungar L, Alperin M, Baharier Z, Cohen R, Reis S. Ability of primary care physician's to break bad news: a performance based assessment of an educational intervention. *Patient Educ Couns* 2006;60:10–5.
- [48] Scheingold L. A Balint seminar in the family practice residency setting. *J Fam Pract* 1980;10:267–70.
- [49] Lipsitt DR. Michael Balint's group approach: the Boston Balint group. *Group* 1999;23:187–201.
- [50] Rabin S, Herz M, Stern M, Vaserfirer I, Belakovsky S, Mark M, et al. Improving the professional self-efficacy cognitions of immigrant doctors with Balint groups. *Isr J Psychiatry Relat Sci* 1996;33:253–9.
- [51] Brock CD, Stock RD. A survey of Balint group activities in US family practice residency programs. *Fam Med* 1990;22:33–7.
- [52] Dokter HJ, Duivenvoorden HJ, Verhage F. Changes in the attitude of general practitioners as a result of participation in a Balint group. *Fam Pract* 1986;3:155–63.
- [53] Bacal HA. Training in psychological medicine: an attempt to assess Tavistock Clinic seminars. *Psychiatry Med* 1971;2:13–22.
- [54] Samuel O. How doctors learn in a Balint group. *Fam Pract* 1989;6:108–13.
- [55] Kjeldmand D, Holmstrom I, Rosenqvist U. Balint training makes GPs thrive better in their job. *Patient Educ Couns* 2004;55:230–5.
- [56] Joukamaa M, Lehtinen V, Karlsson H. The ability of general practitioners to detect mental disorders in primary health care. *Acta Psychiatr Scand* 1995;91:52–6.
- [57] Lustig M. Balint groups – an Australian perspective. *Aust Fam Physician* 2006;35:639–42. 52.
- [58] Stein HF. Reframing Balint: thoughts on family medicine departmental Balint groups. *Fam Med* 2003;35:289–90.
- [59] Roberts M. Balint groups: a tool for personal and professional resilience. *Can Fam Physician* 2012;58:245–7.
- [60] Kjeldmand D, Holmstrom I. Difficulties in Balint groups: a qualitative study of leaders' experiences. *Br J Gen Pract* 2010;60:808–14.
- [61] Pinder R, McKee A, Sackin P, Salinsky J, Samuel O, Suckling H. Talking about my patient: the Balint approach in GP education. *Occas Pap R Coll Gen Pract* 2006;87:1–32.
- [62] Johnson AH, Nease DE, Milberg LC, Addison RB. Essential characteristics of effective Balint group leadership. *Fam Med* 2004;36:253–9.
- [63] Bacal HA. Balint groups: training or treatment. *Psychiatry Med* 1972;3:373–377.
- [64] Bourne S, Lewis E. Research as an educational tool – experience from Balint groups. *Med Educ* 1978;12:344–50.
- [65] Johnson AH. The Balint movement in America. *Fam Med* 2001;33:174–7.
- [66] Marinker M. Balint seminars and vocational training in general practice. *J Coll Gen Pract* 1970;19:79–91.
- [67] Sklar J. Regression and new beginnings: Michael, Alice and Enid Balint and the circulation of ideas. *Int J Psychoanal* 2012;93:1017–34.
- [68] Norell J. The International Balint Federation: past, present, and future. *Fam Pract* 1991;8:378–81.
- [69] Balint E. A study of the doctor-patient relationship by using randomly selected cases. *J Coll Gen Pract* 1967;13:163–73.
- [70] Levenstein S. A report of three years' experience of a Balint group in Cape Town. *S Afr Med J* 1978;54:121–3.
- [71] Bacal H. The doctor as a prescription for his patient. *Can Fam Physician* 1975;103–10.
- [72] Balint E. The possibilities of patient-centered medicine. *J Roy Coll Gen Pract* 1969;17:269–76.
- [73] Kulenovic M. Balint groups in the postwar period in Croatia (with regard to medical and social conditions). *Coll Antropol* 1999;23:293–8.
- [74] Kutter P. From the Balint method toward profession-related supervision. *Am J Psychoanal* 2002;62:313–25.
- [75] Shorer Y, Biderman A, Levy A, Rabin S, Karni A, Maoz B, et al. Family physicians leaving their clinic—the Balint group as an opportunity to say good-bye. *Ann Fam Med* 2011;9:549–51.
- [76] Stern J, Maoz B. Teaching psychotherapeutic interventions to general practitioners through Balint groups. *J Pragmatics* 1987;11:39–47.
- [77] Balint M. Training general practitioners in psychotherapy. *Brit Med J* 1954;115–20.
- [78] Moreau A. Transcript of a Balint group session. *Psychiatry Med* 1972;3:389–94.
- [79] Clarke D, Coleman J. Balint groups. Examining the doctor-patient relationship. *Aust Fam Physician* 2002;31:41–4.
- [80] Luban-Plozza B. Empowerment techniques: from doctor-centered (Balint approach) to patient-centred discussion groups. *Patient Educ Couns* 1995;26:257–63.
- [81] Brock CD. Balint group leadership by a family physician in a residency program. *Fam Med* 1985;17:61–3.
- [82] Balint M. The structure of the training-cum-research-seminars. Its implications for medicine. *J R Coll Gen Pract* 1969;17:201–11.
- [83] Balint E. Symposium Whither psychiatry in general practice? The Balint group approach. *J R Soc Med* 1979;72:469–71.
- [84] Bibace R. Groups facilitate self-reflective practice. *Fam Med* 2004;36:287–9.
- [85] Kulenovic M, Blazekovic-Milakovic S. Balint—Between education and therapy. *Coll Antropol* 1995;19:517–24.
- [86] Mahoney D, Diaz V, Thiedke C, Mallin K, Brock C, Freedy J, et al. Balint groups: the nuts and bolts of making better doctors. *Int J Psychiatry Med* 2013;45:401–11.
- [87] Freyberger H, Besser L. Teaching psychosomatic medicine with special reference to the Balint group and the case supervision group. *Psychother Psychosom* 1982;38:239–43.
- [88] Speidel H. Consultation-liaison throughout the world. Balint group work and final conclusions. *Adv Psychosom Med* 1983;11:198–204.
- [89] Sackin PA. Value of case discussion groups in vocational training. *Brit Med J* 1986;293:1543–4.

- [90] Lichtenstein A. Integrating intuition and reasoning: How Balint groups can help medical decision making. *Aust Fam Physician* 2006;35:987–989.
- [91] Knoepfel HK. Effects of Balint group on its members and leader. *Psychiatry Med* 1972;3:379–83.
- [92] Scheingold L. Balint work in England: lessons for American family medicine. *J Fam Pract* 1988;26:315–20.
- [93] Kulenovic M, Blazekovic-Milakovic S. Balint groups as a driving force of ego development. *Coll Antropol* 2000;24(Suppl 1):103–8.
- [94] Rabin S, Maoz B, Elata-Alster G. Doctors' narratives in Balint groups. *Br J Med Psychol* 1999;72:121–5.
- [95] Hull SA. The method of Balint group work and its contribution to research in general practice. *Fam Pract* 1996;13(Suppl 1):S10–2.
- [96] Brock CD, Johnson AH. Balint group observations: the white knight and other heroic physician roles. *Fam Med* 1999;31:404–8.
- [97] Sowersby P. The doctor, his patient, and the illness: a reappraisal. *J R Coll Gen Pract* 1977;27:583–9.
- [98] Balint M, Balint E, Gosling R, Hildebrand P. *A study of doctors*. London: Tavistock Publications; 1966.
- [99] Salinsky J, Sackin P. *What are you feeling, doctor? Identifying and avoiding defensive patterns in the consultation*. Oxon: Radcliffe Medical Press; 2000.
- [100] Flanagan JC. The critical incident technique. *Psychol Bull* 1954;51:327–58.