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ORIGINAL

THE APPLICATION OF THE BAHRAIN TEAM IN THE RECOVERY PROCESS OF PATIENTS WITH SPORTS INJURIES

Huanli Hu¹, Xueyang Zheng^{*2}

¹ Medical College, Xuchang University, Xuchang, 461000, China.

² Nursing Department, Xuchang Central Hospital, Xuchang, 461000, China.

E-mail: 18238837681@163.com

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ABSTRACT

Balint group is a smaller group of clinicians who constantly meet to discuss cases emerging from their daily practice and focus on the psychological aspects of their work and build on doctor-patient relationships. Our study seeks to examine the application of the Balint group in the recovery process of patients with sports injuries. We used a mixed methods approach involving semi-structured interviews, focus group discussions and a survey. There were medical practitioners from the Chinese Athletic Association who volunteered to undertake the study. The findings showed that participants acknowledged the emotional challenges faced by athletes recovering from injuries (motivation, anxiety, sense of loss). The current methods to address these challenges are perceived to be limited due to time constraints, lack of training, and limited resources. Also, participants expressed interest in The Balint Group as a potential solution because it could offer peer support and learning from colleagues' experiences, improved communication skills to discuss emotional challenges with athletes and a more holistic approach to recovery by addressing both physical and emotional aspects. Our study contributes to the effective management of athletes by medical professionals involved in sports injuries while improving the quality of care and their professional development

KEYWORDS: Balint Group, Quality of Care, Sports Injuries, Medical Professionals and Athletes.

1. INTRODUCTION

Physicians and medical professionals experience high levels of distress

which is a significant area of concern in modern medicine. The effects of burnout are experienced by nearly half of medical students (Dyrbye et al., 2008) and practicing medical personnel in the United States (Shanafelt et al., 2009; Shanafelt et al., 2012). Michael Balint (1957) observed certain details and goals of the Balint group presented in his book "The Doctor, His Patient, and The Illness." He suggested that therapists should possess good personality traits besides their professional medical experience and acquire skills of good contact with the patients (Bar-Haim, 2018; Stelcer, 2011). These Balint groups were expected to help general medical practitioners to increase their relationship with patients and attain an improved comprehension of the patient. Balint group is a smaller group of clinicians who constantly meet to discuss cases emerging from their daily practice and focus on the psychological aspects of their work and build on doctor-patient relationships (Lustig, 2006). In Balint groups, all general medical practitioners and other professionals narrate cases they found difficult under the tutelage of psychoanalysts who provide a leading role during the process. These cases are usually processed after narration with an overall objective of improving the understanding of the doctor-patient relationship and boosting their capacity and professional development as physicians (Stelcer, 2011; Van Roy, Vanheule, & Inslegers, 2015). According to Olds and Malone (2016) conventional Balint groups comprised of more than 10 general practitioners with a 90-minute weekly session under the guidance of a trained leader. The main objective was to increase their knowledge and have an opportunity to reflect on their works by reporting about the desired patients and conducting discussions in safer psychoanalytic environments (Cabral, Fernandes, Lage, Zerbini, & Pereira, 2016).

The return of athletes from various sports injuries is often a lengthy and difficult process because the athletes are subjected to care from several providers and nutritionists who constantly monitor their progress. These healthcare providers and professionals include physicians, athletic trainers, strength and conditioning experts and physical therapists. The recovery process of athletes from injuries involves a process of strength and conditioning programs before resumption of track and field activities. These transitions are significant because the preparation of competitions requires strength and conditioning despite recovery based on medical parameters of flexibility, functional strength, range of motion and inflammations (Caterisano et al., 2019). The prescription of exercises must cover all the fundamental work required by athletes to fully regain their competitive ability and often involve a lot of activities and skills in actual sports (Babu, 2018; Kenney, Wilmore, & Costill, 2021; Weinberg & Gould, 2023). Previous studies (Kellmann & Beckmann, 2018; Kellmann et al., 2018; Truong et al., 2020) have suggested that when athletes have resumed their teams training on strength and conditioning activities, the medical practitioners should put emphasis and analysis on generic movements when performing certain exercises such as closed kinetic chain squats and the

sport-specific movements that comprise of the complete training programs. Besides linear improvement, rehabilitation is usually a disjointed process involving positive and negative outcomes. Although, the recovery process of an athlete is a beneficial input from all providers, they usually suffer from poorly coordinated recovery processes and re-occurrence of similar injuries (Kraemer, Denegar, & Flanagan, 2009). Communication among healthcare professionals and general practitioners is crucial in improving and ensuring positive outcomes of athlete recovery from injury. Lack of clear communication between team coaches, medical professionals, and strength and conditioning experts leads to slow recovery process or decline in the performance of athletes with the re-emergence of new injuries (Hoeft, 2021; Toresdahl et al., 2016). The Balint process forms a crucial process in the recovery of athletes due to sharing of information with others on a weekly basis and improving treatment outcomes. Moreover, the adverse psychological consequences of injuries among athletes are averted due to effective doctor-patient relationship. All coaching staffs and personnel involved in the recovery of athletes must coordinate their work properly and increase the efficiency of the rehabilitation process.

1.1 Research Objective

Our rationale is to examine the application of the Balint group in the recovery process of patients with sports injuries. We seek to examine the transition process from rehabilitation of athletes to becoming ready for strength and conditioning exercises before resuming complete sporting activities.

2. Methods

2.1 Study Design and Sample Size

A mixed methods approach was adopted to obtain qualitative data through focus groups and semi-structured interviews while quantitative data was obtained through a survey that examined the pre-test and post-test changes in Balint groups. The study was conducted from September 2023 to December 2023 and consisted of a random sampling of 50 medical practitioners from the Chinese Athletic Association who had voluntarily agreed to undertake the study. All participants attended to athletes who were injured and were in the recovery process before fully resuming their track and field activities. Participants were at least 25 years old and consisted of 35 males and 15 females.

2.2 Ethical Considerations

Our study was approved by the Ethics Committee of the Chinese Athletic Association and were conducted according to the guidelines of the Helsinki Declaration of Animal and Human Experiments. All participants were assured

of anonymity and personal identifiers were eliminated from the data.

2.3 Data Collection

A survey was administered to examine the feasibility and potential benefits of the Balint group for healthcare professionals involved in the recovery of athletes with sports related injuries. The survey consisted of three sections with the first section involving demographics on age, gender, years of experience in sports medicine, type of practice, primary sports treated (multiple choice). The second section of the survey involved questions on current practices that were measured on a five Point-Likert scale. These questions assessed various parameters such as frequency of encountering athletes who experienced emotional challenges during recovery, perceived impact of these emotional challenges on the recovery process, current methods used to address athletes' emotional challenges and the confidence level in addressing athletes' emotional challenges. The last section involved the Balint group involving a set of open-ended and multiple-choice questions focusing on the awareness of the Balint group concept, perceived potential benefits for themselves and their patients. The survey was administered electronically using a secure online platform. The invitation to participate, along with the survey link, was emailed to a random sample of 50 medical practitioners from the Chinese Athletic Association who treat athletes with track and field injuries during recovery. Participation was voluntary and informed consent was obtained electronically before participants began the survey. The study employed qualitative methods to explore the quality of nursing care and professional identity on the application of The Balint Group in the recovery process of athletes with sports injuries. Two data collection approaches were utilized consisting of focus groups and semi-structured interviews. Interviews and focus group discussions were conducted to explore the perspectives of medical professionals working in sports medicine or related fields on how The Balint Group could influence the quality of care they provide to athletes recovering from injuries and their professional identity. These interviews and focus group discussions focused on how The Balint Group could influence the quality of care provided to athletes recovering from injuries based on nursing principles and practices. Interview questions were based on the impact of emotional challenges on quality of care, the Balint group and quality of care delivery, and the Balint group and broader professional identity.

2.4 Data Analysis

All data were collected and stored before processing. Quantitative data analysis was carried out in Graph Pad Prism with normally distributed data represented as mean (SD). Non-normalised data were presented as percentages and interquartile range. Statistical significance was inferred at a p

< .05. Qualitative analyses involved thematic analyses to identify recurrent patterns and themes across focus groups and semi-structured interviews.

3. Results

3.1 Demographics

The study sample consisted primarily of males, with 76% (n=38) of participants identifying as male. Females comprised the remaining 24% (n=12) of the sample. Participants were aged from 25 to 54 years old (see Figure 1). The largest age group was 35-44 years old, representing 44% (n=22) of the sample. The average age was 36.9 years old (SD = 5.2). Participants between 25-34 years old comprised 30% (n=15) of the sample with an average age of 31.2 (SD = 3.8). The 45-54 age group accounted for 20% (n=10) of participants with an average age of 48.5 (SD = 3.1). Finally, only a small percentage (6%, n=3) of participants fell into the 55+ age category.

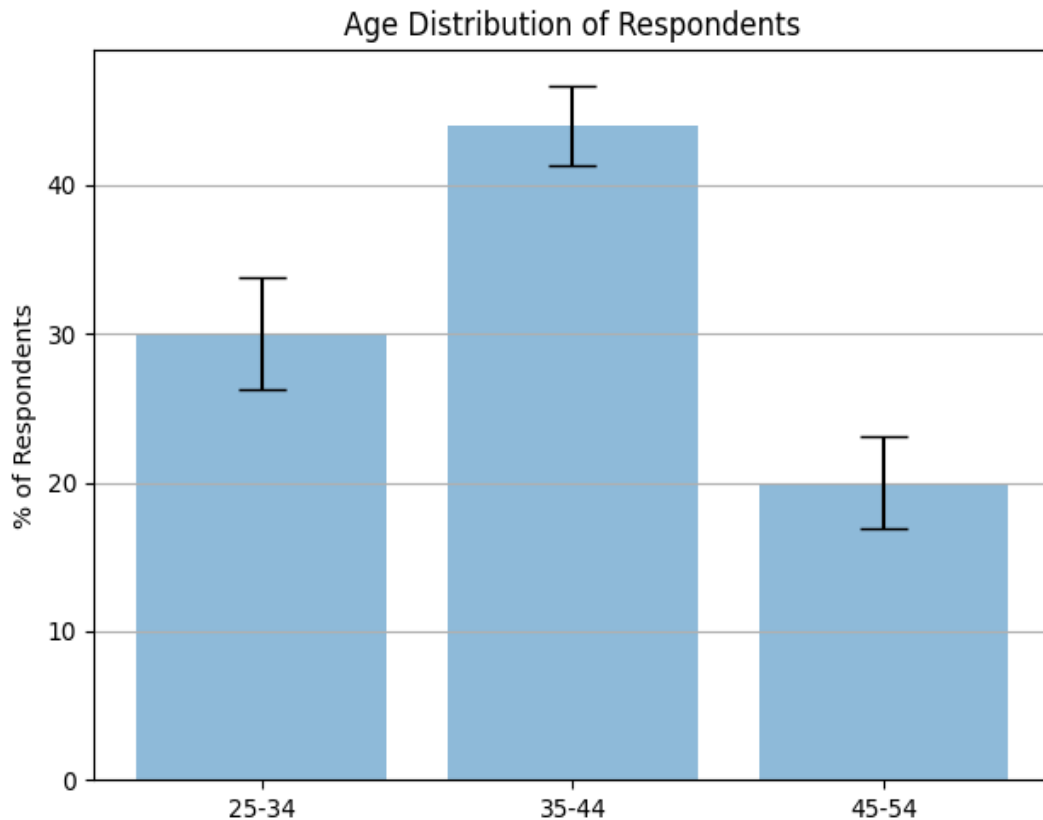


Figure 1: A Bar chart of the Distribution of Participants Based on Age

The participants possessed a range of experience in sports medicine (see Figure 2). The most well-represented group had 6-10 years of experience, accounting for 36% (n=18) of the sample. Following closely were those with 11-15 years of experience (28%, n=14) and 1-5 years of experience (20%, n=10). A smaller group (16%, n=8) had over 16 years of experience.

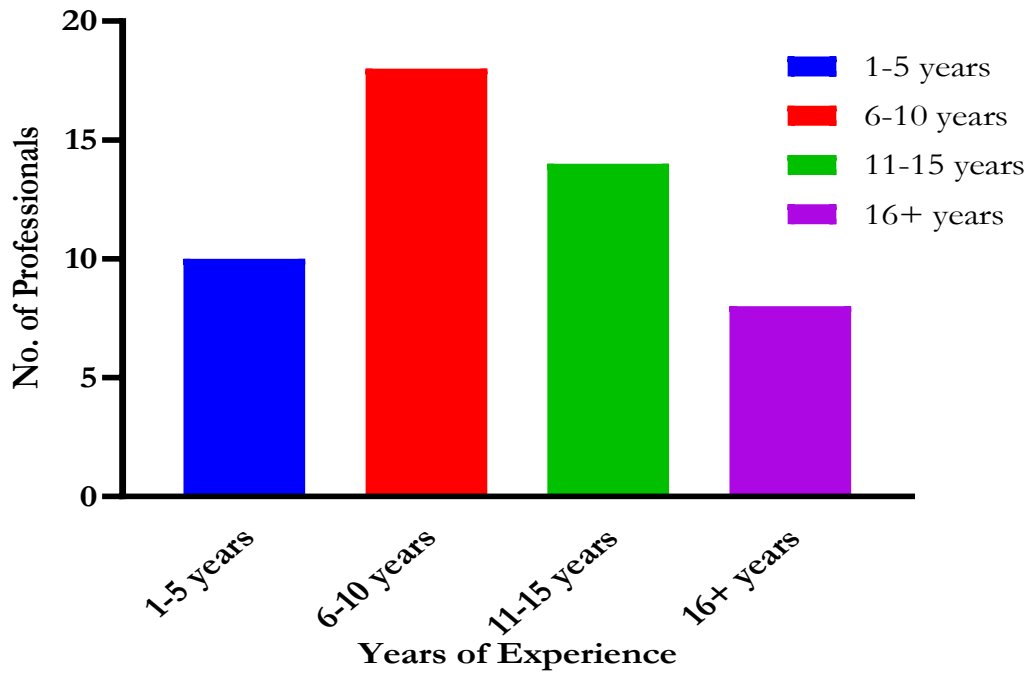


Figure 2: Analysis of the number of professionals based on years of experience in sports medicine.

The participating healthcare professionals worked in a variety of practice settings (see Figure 3A). Team physicians formed the largest group (40%, n=20), followed closely by those working in orthopaedic clinics (36%, n=18). Sports rehabilitation centres were represented by 16% (n=8) of participants, with the remaining 8% (n=4) working in other practice types. In Figure 3B, Football (soccer) was the most common sport treated, with 64% (n=32) of participants reporting experience in this area. Basketball (56%, n=28) and Track and Field (50%, n=25) were also frequently reported, followed by Baseball (36%, n=18) and Swimming (30%, n=15). Volleyball rounded out the list with 20% (n=10) of participants treating athletes in this sport.

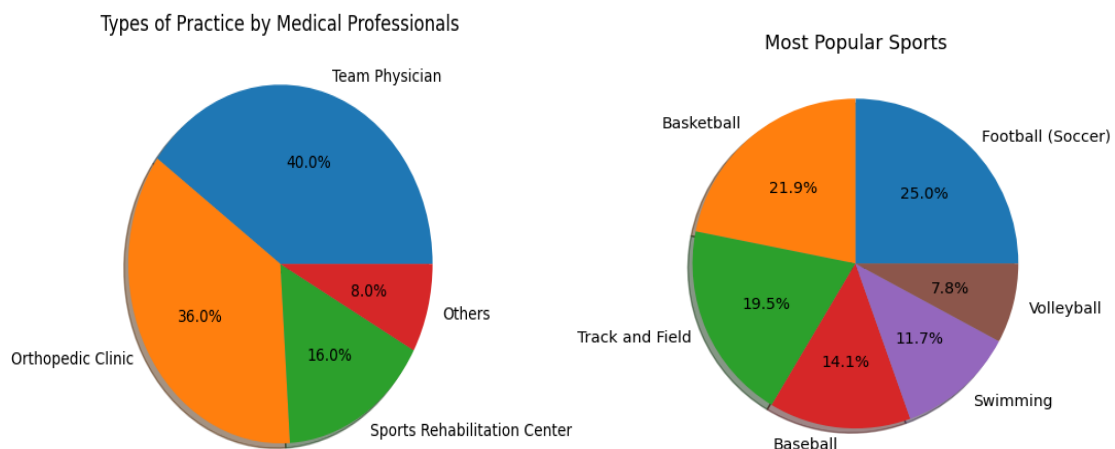


Figure 3: Pie Chart distribution of the types of practice by medical professionals (A) and the most popular sports (B).

3.2 Analysis of Current Practices and Quality of Care

In this study, healthcare professionals reported encountering athletes experiencing emotional challenges during recovery with varying frequencies. The most frequent response was "Often" (36%, n=18), followed closely by "Sometimes" (40%, n=20). Less frequent responses included "Rarely" (10%, n=5) and "Never" (4%, n=2). Only a small percentage (10%, n=5) reported encountering athletes with emotional challenges "Always" (See Table 1).

Table 1: Analysis of Frequency of Encountering Athletes with Emotional Challenges

FREQUENCY	N	%
NEVER	2	4%
RARELY	5	10%
SOMETIMES	20	40%
OFTEN	18	36%
ALWAYS	5	10%

Table 2: The Balint Group and Improved Communication for Quality Care

BENEFIT OF THE BALINT GROUP	DESCRIPTION	IMPACT ON QUALITY OF CARE
IMPROVED COMMUNICATION SKILLS	Healthcare professionals develop skills to discuss emotional challenges openly and effectively with athletes.	More accurate assessment of athlete needs: Enhanced communication allows for a deeper understanding of athletes' emotional state, leading to more tailored care plans. * Increased adherence to treatment plans: Open communication fosters trust and understanding, leading to better athlete engagement in rehabilitation. Reduced risk of miscommunication and complications: Clear communication minimizes misunderstandings and ensures all healthcare professionals involved in the athlete's care are on the same page.
PEER SUPPORT AND SHARED BEST PRACTICES	Sharing experiences and strategies with colleagues in a safe space.	Standardization of quality care practices: The Balint Group can facilitate the sharing of best practices for addressing emotional challenges, promoting a more consistent and high-quality approach across different healthcare professionals. Reduced risk of emotional burnout: Peer support can help healthcare professionals manage their own emotional responses to athlete challenges, leading to better overall care delivery.

In Table 2, the Balint Group has the potential to improve quality of care for athletes recovering from injuries. By fostering improved communication skills among healthcare professionals, The Balint Group can lead to a more

accurate assessment of athlete needs, increased adherence to treatment plans, and reduced miscommunication. Additionally, sharing best practices through peer support can help standardize quality care practices and reduce emotional burnout among healthcare professionals, ultimately leading to better overall care delivery.

Table 3: The Balint Group and Promoting Patient-Centered Care

BENEFIT OF THE BALINT GROUP	DESCRIPTION	IMPACT ON QUALITY OF CARE
ENHANCED EMPATHY AND EMOTIONAL INTELLIGENCE	Healthcare professionals develop greater ability to understand and respond to athletes' emotional needs.	Increased patient satisfaction: Athletes feel their emotional well-being is acknowledged and addressed, leading to greater satisfaction with the care they receive. Improved patient outcomes: By addressing emotional challenges, healthcare professionals can create a more supportive environment that facilitates healing and recovery. Reduced risk of treatment abandonment: When athletes feel understood and supported emotionally, they are more likely to adhere to treatment plans and complete their recovery process.

In Table 3, the Balint Group could enhance quality of care by improving healthcare professionals' empathy and emotional intelligence. This can lead to increased patient satisfaction as athletes feel their emotional needs are recognized.

Table 4: Challenges and Limitations in Addressing Emotional Well-being based on Quality of Care

THEME	PARTICIPANT QUOTES	IMPACT ON QUALITY OF CARE
REDUCED MOTIVATION & ADHERENCE	"Athletes lose motivation if they're frustrated. It slows progress and makes it harder to deliver effective care plans." (Sports Physician)	- Difficulty implementing rehabilitation programs due to decreased motivation. - Delays in recovery timelines. - Increased risk of complications due to non-adherence.
ANXIETY AND RE-INJURY FEAR	"The constant worry about re-injury creates stress, making it harder to build rapport and trust with athletes." (Physical Therapist)	- Difficulty establishing a strong therapeutic relationship, hindering effective care delivery. - Increased focus on anxiety management potentially diverting resources from physical rehabilitation.
SENSE OF LOSS OF IDENTITY	"Athletes feel lost without their sport. It affects their mental well-being and can hinder their engagement in rehabilitation." (Athletic Trainer)	- Decreased focus and engagement in recovery activities due to emotional distress. - Potential for overlooking or minimizing the emotional impact on the overall recovery process.



Figure 5: Analysis of the Professional Growth with the Balint Group.

The Balint Group's focus on skill development and peer support can bolster professional identity for healthcare professionals. Learning new communication and emotional support strategies can enhance feelings of competence and confidence. Additionally, sharing experiences and challenges in a safe space reduces isolation and fosters a sense of professional community, aligning with core values of lifelong learning and belonging (see Figure 6).

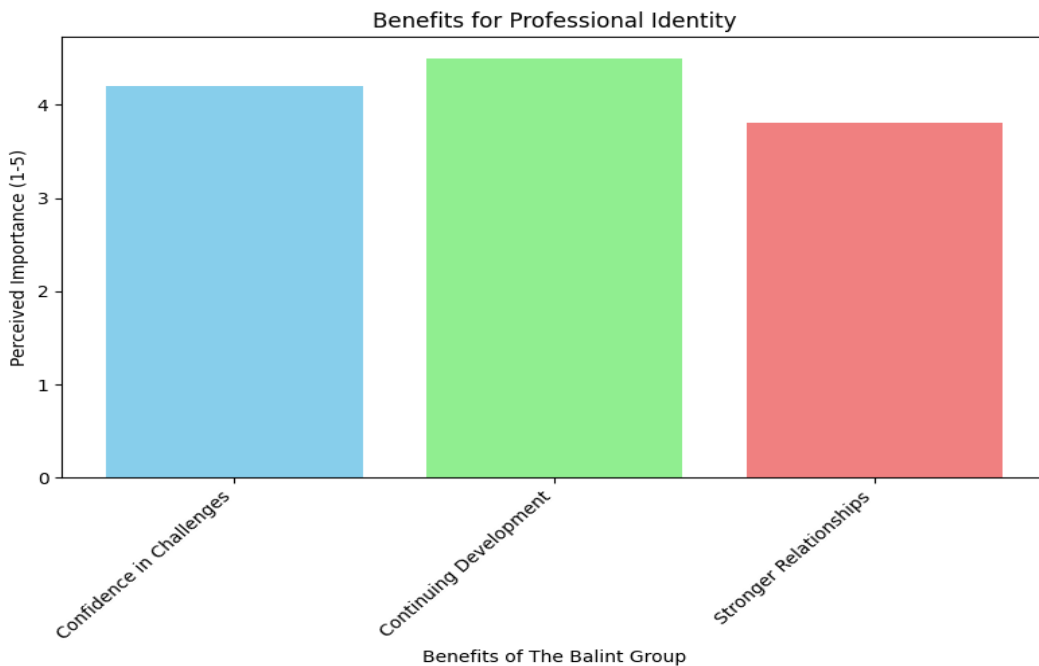


Figure 6: The perceived importance of the benefits of professional identity.

The Balint Group's exposure to new approaches can enrich professional identity for healthcare professionals. Learning The Balint Group model and exploring alternative methods for addressing emotional challenges in athletes fosters a sense of professional growth. This commitment to continuous learning

strengthens their ability to deliver high-quality care, contributing to a sense of professional accomplishment.

4. Discussion

Our study established the importance of addressing emotional challenges in athlete recovery. It also revealed perceived limitations in current methods used by healthcare professionals. Furthermore, we analysed the perceptions of The Balint Group as a potential tool and found that Participants expressed interest in the Balint group as a way to improve communication skills, gain peer support, and provide more holistic care for the recovery of athletes. Our findings were consistent with previous studies (Olds & Malone, 2016; Van Roy et al., 2015) who proposed that coaching staff and administrative personnel involved in sports related injuries of athletes should strive towards ensuring that care is offered at all points or steps during the rehabilitation and recovery of athletes. The requirement of funding requires that qualified medical practitioners are capable of mitigating various injuries and improving the recovery of athletes at several levels. In most cases of sports injuries, the healthcare providers are required to have sufficient knowledge, training and experience requires in achieving complete recovery of athletes from surgical operations to their return to play or regular activities.

We established that medical practitioner and professionals acknowledged the emotional challenges faced by athletes recovering from injuries (motivation, anxiety, sense of loss). A qualitative study by Torppa, Makkonen, Mårtenson, and Pitkälä (2008) suggested that there exist five triggers for case narrations (witnessing injustice, value conflict, difficult human relationships, incurable patient, role confusion) that originated from three distinct contexts (patient encounters, confusing experiences in medical education, tension between privacy and profession). Four main discussion themes could be identified (feelings related to patients, building professional identity, negative role models, cooperation with other medical professionals). Their findings propose that the concept of case in student Balint groups was wider than in traditional Balint groups. Feelings related to patients and to one's own role as a doctor were openly discussed in groups. Their discussions often touched on professional growth and future professional identity as doctors. Our findings recorded significant emotional challenges faced by athletes recovering from sports injuries. A prominent theme was the impact on motivation, with one team physician highlighting the "frustration of being sidelined" that can hinder progress. These findings have practical implications in proposing that the Balint groups may support the professional growth of medical professionals. Previous studies (Hamilton, Taylor, & Maben, 2023; Taghavi et al., 2019) have suggested that one of the major objectives of Balint group is to refine and alter the initial emotional attachment and experiences using tutored reflections. One possible explanation is that the analysis of cases by Balint group members

allows them to reveal their inner experiences and emotional feelings. The open discussions in Balint groups exposes medical professionals to self-reflections and interactions with colleagues in a safe transparent and non-judgmental manner. The presence of groups focusing on feelings enables the realisation of self-awareness of feelings and permitting them for analysis, organisation and effective ways of controlling. Studies have proposed that emotions and feelings associated with clinical works could have immense benefits to the patients if they are adequately understood and tolerated by the doctors or medical professionals (Robertson & Long, 2018).

Balint groups have been widely applied in residential family practice (Lichtenstein, Antoun, Rule, Knowlton, & Sternlieb, 2018; Player et al., 2018), training of medical interns and professionals (Calcides, Didou, Melo, & Oliva-Costa, 2019) and continuous medical education (Yazdankhahfar, Haghani, & Omid, 2019). Several modifications of the conventional Balint technique have been analysed and implemented in response to the needs of several individuals. One recent modification is the tailored approach in the management of quality of care and treatment outcomes of athletes with sports related injuries. Damarell et al. showed that young medical practitioners and doctors are constantly faced with the difficulties of harmonising scientific training and the uncertainty of patients in general practice (Damarell, Morgan, & Tieman, 2020). Although, in several countries and populations the use of Balint groups in medical practice has led to positive outcomes. O'Neill et al. suggested that there were several ways of improving the awareness of medical professionals or interns or students about the emotional (O'Neill, Foster, & Gilbert-Obrart, 2016), nonbiomedical components of illness and the dynamics of the doctor-patient relationship. Their findings suggested that the original Balint technique should be modified for medical students and practitioners with less than 1 year of experience because they have not been exposed to various types of patients for a long time in order to develop and grow constructive doctor-patient relationships. Additionally, there should be increased awareness about the dynamic changes in the relationship between patients and doctors while focusing on the significance of emotional and psychological factors including an individual's self-bias and prejudice when analysing patients. We propose that the Balint groups are an effective way of encouraging the medical professionals and practitioners in sports injuries to reflect on the significance of emotions and its role in the doctor-patient relationship. Balint groups promote a sense of appreciation and reflective group discussions regarding the nonmedical aspects of illness and their effects on the doctor-patient relationship. Moreover, it allows medical professionals to effectively manage and control their prejudices and promotes young professionals in embracing the concept of "putting oneself in the shoes of the patient" and trying to imagine how it would feel if they were in the patient's position. Lastly, Balint groups were capable of addressing a lack of sensitivity by medical professionals for the dignity and respect of the patient and sometimes inadequate time to devote emotional care

due to the constant burnout and pressure in situations such as emergency departments.

Current methods to address these challenges are perceived to be limited due to time constraints, lack of training, and limited resources. Previous studies by (Henshall et al., 2022; McManus, Killeen, Hartnett, Fitzgerald, & Murphy, 2020; Yakeley, Shoenberg, Morris, Sturgeon, & Majid, 2011) have suggested that medical professionals who underwent participation in the Balint group demonstrated higher scores compared to baseline performance at 1 year. They proposed that student's acquisition of knowledge of communication skills undergoes optimisation when they are trained in the presence of a supervised contact. Psychodynamic psychotherapy teaching techniques are considered effective in increasing the knowledge about the doctor-patient relationship and communication skills. According to Bar-Sela et al. participation in Balint groups improves communication skills and lowers the incidence of burnout among residents (Bar-Sela, Lulav-Grinwald, & Mitnik, 2012). Similarly, Airagnes et al. found that participation in the Balint group led to increased empathy among medical professionals and interns (Airagnes et al., 2014). Our findings showed that participants expressed interest in The Balint Group as a potential solution because it could offer peer support and learning from colleagues' experiences, improved communication skills to discuss emotional challenges with athletes and a more holistic approach to recovery by addressing both physical and emotional aspects. The findings of Player et al. suggest that the effective evaluation of the experiences of physicians from the Balint group can be based on nine positive valence themes of patient needs (Player et al., 2018), bonding, reflection, empathy, venting, acceptance, blind spots, individual experiences and perspectives despite the presence of three negative valence themes of repetition, uncertain impacts and uneasiness. Previous studies (Farkas, Csukly, & Fonagy, 2024; Graham, Gask, Swift, & Evans, 2009; McCarron et al., 2024) have analysed the experiences of residents in the Balint group and found that they were embroiled in provoking anxiety, and certain individuals struggled to utilise case discussions despite the overall learning experience. Parker and Leggett examined the clinical reflections derived from Balint groups and found that the fidelity of the Balint group experiences were realised and student attitudes were positive based on the emotional experiences (Parker & Leggett, 2012). In sports injuries, the severity and complexity of the surgical and medical effects alters the rate of recovery and the duration of supervision during rehabilitations. We suggest that in all cases of sports injuries, the quality of care is improved by medical professionals in Balint groups because of the benefits derived such as clear and open communication from each individual participating in the care process until full medical clearance is achieved.

5. Conclusion

Our examination of the application of Balint groups by medical

professionals in the management and recovery of athletes from sports injuries has proved that the technique is effective in increasing quality of care provided to the patients and professional development of medical professionals. Balint groups are effective in increasing the awareness of medical professionals on the doctor-patient relationship and the nonmedical aspects of illness. Unless full medical clearance is realised from all participating teams, injured athletes are considered patients during the recovery process.

Other specialists such as strength and conditioning physios should provide their regular assessments to healthcare and medical professionals using reliable and quantified data that can depict lack of progress and trends derived from improvement in existing conditions. Our findings contribute to the realisation of a better plan and utilisation of effective Balint groups in the recovery process of sports injuries and its role in medical education. Policymakers in sports can adopt these findings in making informed decisions. Moreover, these findings can be used by young medical practitioners or medical students in increasing their professional life and as a basis for future expansion of knowledge.

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