LOCUS JOURNAL: Research & Devotion
Volume 4 No. 11 November 2025
E-ISSN 2829-7334| P-ISSN 2829-5439
Homepage: https://locus.rivierapublishing.id/index.php/jl

Becoming A Nurse at Sporting Events: A Qualitative Exploration of Professional Practices and Challenges

Muhammad Putra Ramadhan[1], Qory Tifani Rahamtika[2], Neni Fidyasanti[3], Nurul Evi[4], Nurma Afiani[5], Fai'zaturrizqiyyah[6]
[1,2,3,4,5]Universitas Negeri Malang, Indonesia
[6]Rumah Sakit Hermina Tangkuban Perahu Malang
Email: muhammad.putra.fk@um.ac.id, qory.tifani.fik@um.ac.id, neni.fidya.fk@um.ac.id, nurul.evi.fik@um.ac.id, nurma.afiani.fik@um.ac.id

Abstract:
Background: The advancement of modern sports demands a comprehensive, rapid, and responsive healthcare system, wherein nurses—as integral members of multidisciplinary medical teams—play a crucial role in safeguarding athlete safety and performance. This study aimed to explore nurses' experiences, roles, challenges, and expectations as part of medical teams during sporting events. Methods: A qualitative study employing a phenomenological approach was conducted to gain in-depth insights into the experiences of eight nurses who had served on sports medical teams in Malang, Indonesia. Data were collected through in-depth interviews and analyzed thematically. Results: Five main themes emerged: (1) background and motivation, (2) roles and responsibilities, (3) interprofessional collaboration, (4) practical challenges in the field, and (5) expectations and recommendations. Nurses participated due to personal and professional motivations, fulfilling dynamic roles ranging from first aid provision to health education. However, they encountered limitations such as inadequate equipment, heavy workloads, and unclear authority boundaries. They also expressed desires for specialized training and greater professional recognition. Conclusion: Nurses are essential pillars within sports medical teams, yet systemic support is needed to strengthen their roles and professional standing. The findings highlight the urgent need to establish standardized training programs, clarify professional scopes of practice, and develop supportive policies from healthcare and sports institutions. These measures are essential to formalize sports nursing as a specialized field, ultimately enhancing the quality of healthcare delivery in sports and optimizing athlete safety and performance outcomes in Indonesia.

Keywords: Nursing, medical team, sports, qualitative

Corresponding: Muhammad Putra Ramadhan
E-mail: muhammad.putra.fk@um.ac.id

INTRODUCTION

Nursing is defined as a profession that focuses on caring for individuals, families, and communities to maintain or improve health and quality of life (Stanhope & Lancaster, 2015). The profession involves a combination of clinical skills, ethical considerations, and emotional support, emphasizing the importance of holistic care (Maragakis et al., 2021). Today, the regulation and field of nursing practice has evolved rapidly reflecting changes in healthcare and the increasing recognition of nurses as essential healthcare providers.

The presence of nurses in the medical team during the match has a very crucial role in ensuring the safety and health of athletes during the competition (Mountjoy et al., 2021). In stressful and dynamic match situations, nurses are often the first to respond to an injury or urgent medical condition (Bohström, Carlström, & Sjöström, 2017). Their duties include handling acute injuries, monitoring athletes' health, and coordinating with other medical personnel to provide quick and appropriate interventions (Rehberg & Konin, 2024).

During the match, the nurse is in charge of continuously monitoring the athlete's condition (Coutts, Crowcroft, & Kempton, 2021). This includes early identification of potential health problems such as dehydration, fatigue, or more serious injuries such as fractures or head trauma (Aghajani, Tapeh, Bahmani, Golmohammadi, & Vahed, 2022). The ability of nurses to make quick decisions is essential to prevent further complications. In addition, nurses are also trained to provide first aid, such as stopping bleeding, immobilizing fractures, or providing oxygen therapy in emergency situations (Buettner & Buettner, 2021; Rafailova, 2021).

Previous research has shown that collaboration between nurses, physicians, and physiotherapists within sports medical teams can improve the efficiency and effectiveness of injury management in the field (Kaur, Kumar, & Partap, 2025). One of the results of the study emphasized the importance of implementing international protocols such as the FIFA Medical Emergency Bag to ensure medical readiness in emergency situations at sports matches (al Tunaiji et al., 2026). In practice, nurses also often play a role in providing education to athletes and coaches regarding injury prevention measures during matches (Horan et al., 2023).

However, the role of nurses during matches also faces challenges, especially in developing countries (Garrett, 2017; Razu et al., 2021). Limited medical resources, lack of specialized training, and time pressures are major obstacles (Bijani, Abedi, Karimi, & Tehranineshat, 2021). Therefore, this study aims to explore in depth the experiences, roles, challenges, and expectations of nurses serving on sports medical teams during matches (Pentecost, Richards, & Frost, 2018). The results of this study are expected to provide a comprehensive understanding to identify areas for improvement, support the development of specialized training, and contribute to policy-making that strengthens the role and professionalism of sports nurses in Indonesia. Therefore, emergency simulation training and sports injury management need to be improved to prepare nurses for various situations in the field (Sharma, Baviskar, Sippy, & Kubal, 2024). Further research is needed to explore the experiences and contributions of nurses in sports medical teams, as well as their impact on athlete safety and performance (Willson, Kerr, Battaglia, & Stirling, 2022). With this strategic role, nurses are not only actors in injury management, but also important partners in creating a safe match environment and supporting athletes' health holistically (Barkley, Taliaferro, Baker, & Garcia, 2018). A multidisciplinary approach involving nurses in the medical team is an important step in advancing sports medicine (van Hattum et al., 2022).

RESEARCH METHODS

Design

This study uses a qualitative research design with a phenomenological approach to explore the experiences and views of nurses who serve in sports medical teams during matches. This approach aims to understand the meaning of the experiences experienced by nurses in dealing with athletes' medical conditions on the field. [10]–[12].

Population and Sample

The research population includes all nurses who have been involved in sports medical teams, both at the local, national, and international levels. Nurses who have at least one year of

experience in the sports medical team during the game. This study uses purposive sampling by considering the representation of experience and background. The inclusion criteria in this study are 25-35 years old, have experience in the medical team at sports events for at least 1 year, have experience handling sports injuries or sports conditions during matches. Meanwhile, the exclusion criterion in this study is not willing to be a respondent and complete the research. The number of samples is determined until data saturation is reached. In this study, data saturation was fulfilled after 8 respondents.

Data Collection

Data was collected from June to August 2025. Data collection begins by explaining to participants the purpose, objectives, and procedures of the research. Furthermore, the researcher asked for the consent of the participants for their willingness to participate in the study. Data collection was carried out with in-depth interviews with semi-structured roles that included the roles and responsibilities of nurses, collaboration with other medical teams, challenges and strengthening of nurses as medical teams at sports events. At the time of the interview, the researcher also used a semi-structured interview guideline with open-ended questions that allowed participants to develop their answers. This will give the participants freedom and flexibility in answering questions during the interview. The interview was conducted with a duration of 60 minutes. In addition, the non-verbal responses directed by the participants were also documented through field notes. In this study, the interview ended by concluding the interview and confirming that all questions had been answered. Furthermore, if needed, the researcher will make a contract for the next meeting to validate information that is not clear or is still lacking.

Data Analysis

The data analysis in this study began with verbatim and transcription of the results of the interview recording. Then, the data that has been transcribed is analyzed thematically. Thematic analysis was carried out by writing down word for word that became important, repeatedly reading the transcript that had been compiled, quoting meaningful statements from all participants, and creating specific keywords. The researcher organized the groups of meanings into sub-themes and themes by compiling a table of themes grids. In the final stage, the researcher validated the experience of the nurse becoming a sports medical team by asking the participants to review the results of the verbatim interview, then combining the validation data into the description of the results of the study to get a complete picture of the participant's experience [12], [13].

RESULTS AND DISCUSSION

Table 1 shows that there are three female participants and five male participants. Participants who have the last education of S2 are two people and the rest have the last education of the nursing profession. All participants have been involved in the medical team for more than 1 year with the longest experience of 2.5 years. Meanwhile, the thematic analysis found five main themes, namely 1) Background and motivation to become a sports medical

team, 2) Roles and responsibilities of nurses, 3) Interprofessional collaboration, 4) Practical challenges in the field, and 5) Expectations and recommendations for nurses. The themes and sub-themes in the study are presented in Table 2.

Table 1. Characteristics of Partiality

Yes	Participants	Age	Gender	Final Education	Long Time in the Medical Team
1.	P1	30	Woman	Occupational Therapists	1 year
2.	P2	26	Woman	Occupational Therapists	1.5 years
3.	P3	27	Man	Occupational Therapists	2 years
4.	P4	40	Man	S2	2.5 years
5.	P5	28	Woman	Occupational Therapists	1 year
6.	P6	36	Man	S2	2 years
7.	P7	31	Man	Occupational Therapists	1.5 years
8.	P8	33	Man	Occupational Therapists	2 years

Source: Primary data analysis, 2025

Table 2. Results of Theme and Subtheme Analysis

Theme	Subtheme
Background and motivation to become a medical team nurse	Personal and professional reasons Interest in sports
Roles and responsibilities of nurses	Description of duties before, during, and after the game Differences of responsibilities by sport Role in acute injury management and short-term recovery Educational duties to athletes, coaches, and sports teams
Interprofessional collaboration	Communication patterns between nurses, doctors, and physiotherapists Medical decision-making
Practical challenges in the field	Limited equipment, facilities, and match locations Lack of human resources Lack of nurses' authority
Expectations and recommendations for nurses	Specialized training and certification Institutional and organizational policy support Recommendations for sports nurses

Source: Primary data analysis, 2025

Theme 1: Motivation and reasons for becoming a sports medical team

Subtheme 1: Personal and professional reasons

The involvement of participants in sports medical teams begins with a combination of personal motivation and professional needs. Personal reasons are more related to feeling driven by a love of dynamics in the field or as an opportunity to find a new work atmosphere. Meanwhile, professional needs are related to institutional tasks due to the demand for medical assistance at sports events. This is shown by the following participant statements:

"Initially, it was because there was a request from the medical team. So, I can't help but join, because my name is appointed."

"If my reason for wanting to be involved in the sports medical team is actually looking for a new atmosphere, because there is a new work atmosphere. Moreover, if it is a unique clinical experience in the field and not all patients get that opportunity."

Subtheme 2: Interest in the world of sports

Personal interest in sports is known to be one of the factors involved in some nurses becoming sports medical teams. This attachment is related to your background as a former athlete, a hobby, or just having fun watching games. This is shown by the following statements:

"I myself actually want to be a nurse who is a member of the medical team because basically I like sports, especially when I am in charge of football. So yes, I'm getting more interested"

"I used to pursue the world of pencak silat. Then I was assigned to be a medical team at the pencak silat sports event, I felt quite familiar with the sport and knew what the risk of injury was, so I felt confident"

"....how about it, mas, like working while enjoying hobbies"

Theme 2: Roles and responsibilities of nurses

Subtheme 1: Task descriptions before, during, and after the game

Participants have described their role comprehensively from the entire cycle of match activities. Participants explained that they played a role from before, during, and after the game. From this sub-theme, it is clear that nurses involved in the medical team have very important roles and responsibilities.

"Before the game I usually check all the medical equipment, from plasters, bandages, blinds, cervical collars, oxygen to AEDs."

"Before the match, I focus on preparing the equipment that will later be brought to the medical team's table. But I also have to have my own equipment ready in a small bag, usually filled with analgesic spray, plaster, scissors, betadine, and gauze."

"The main thing is actually in addition to preparing the equipment, we also have a briefing with the committee and the referee or the judge. Because different sports sometimes have different flows of help, some are direct, but there are also those who wait for the referee to call the medical team, then we will move."

"During the game, it is clear that we must focus on the match, because the injury incident also does not know when it will happen, then if that focus we can also predict what injury will occur"

"Well, when the match time is over, it is clear that we will tidy up all the tools. And what we must not forget is that we check the condition of injured athletes. Sometimes they also still need further treatment, sometimes they also need a referral to the hospital."

Subtheme 2: Differences in responsibilities by sport

Basically, a nurse is required to have flexibility, both in a clinical setting such as in a hospital, and when being a sports medical team. This is because nurses who are in charge of being a sports medical team can be in charge of several different sports. This subtheme is shown with the following description:

"When I was on duty in volleyball, I had the most ankle sprains because of the wrong focus and arm injuries because the movements were too hard during the smash."

"In the martial arts branch such as pencak silat, bruises, tears, nosebleeds are the ones I encounter the most often so far."

"In the past, when I was on guard at table tennis and badminton, the injuries were almost the same. Most in the upper extremities, wrist and shoulder sprains."

"I am more often in football, usually when AREMA FC plays I am almost certain to be on duty. Well, the injury is an ankle sprain, a knee, but in the past I have also found a tear in the temple."

Subtheme 3: Role in acute injury management and short-term recovery

Nurses have the main task of providing first aid for sports injuries, especially acute injuries. In addition, nurses are also actively involved in ensuring early rehabilitation to determine if the athlete is able to continue the game or should be rested and replaced.

"As soon as there was an athlete who fell and couldn't stand, I immediately ran into the field. I asked where the pain complaint was. Then, I gave an analgesic spray to relieve the pain. Furthermore, coordination with doctors and physiotherapists for further therapy"

"At that time, there were people who had ankle sprain. I helped give them ice packs and put on elastic bandages."

"Usually athletes only need pain relief. After I give it, I also evaluate how the range of motion is, whether there is pain when moved. If he feels safe, he can continue, if he is replaced by another player, I usually help a physiotherapist for initial rehabilitation such as range of motion training."

Subtheme 4: Educational duties for athletes, coaches, and

The role of nurses is not only to provide first aid, but also to provide education to athletes, coaches, and sports teams. This education is related to the condition of the injury and what needs to be done to carry out further examinations and self-care after the injury.

"I will definitely provide educational sessions. Because sometimes after an injury, it is still swollen, it must be massaged so that it heals quickly"

"My education is more towards advanced medical food such as ultrasound or MRI, especially if I find severe injuries, such as the one I found in the past ankle sprain until swelling and bruising"

"The coach sometimes forces his athletes to keep playing. Even worse, sometimes the athletes are forced to keep playing until the end. Now here our task is important because we have to educate coaches and players. We certainly don't want the injury to get worse and the athlete's career can be ruined."

"Education is very important for me, because then self-care is carried out by the athletes themselves. The usual education that I convey is not to massage for up to 5 days, don't make a lot of movement, give an ice pack for 10-15 minutes and put on an elastic bandage or use a support such as crutches when walking."

Theme 3: Interprofessional collaboration

Subtheme 1: Communication patterns between nurses, doctors, and physiotherapists

In its application, collaboration between professions is greatly influenced by the communication patterns that exist among team members. This is because in the medical team, not only nurses are involved, but doctors, physiotherapists, and ambulance officers. Participants explained that open and effective communication is needed and has been implemented. However, some participants explained that there were communication barriers due to differences in perception or because they were involved together as a medical team for the first time.

"If I am in the same team, it will continue to be the task. So our communication problems have been running as usual. What do you mean, I already understand that for example giving certain codes when an injury occurs."

"Well, in the past, we had recently worked together, sometimes there was some misunderstood communication. Moreover, sometimes there is a rotation of nurses and doctors assigned from the hospital."

"In the past, there was a miscommunication, because the communication was not effective and not clear. Moreover, the match pass is also crowded with cheering spectators"

Subtheme 2: Medical decision-making

In the medical decision-making process in the field, sometimes it cannot run equally and meet the principle of collaboration. Some participants explained that in some cases, doctors or physiotherapists tend to be more dominant. However, it is not uncommon for doctors to also need input from nurses and physiotherapists.

"So far, I as a nurse have only been a decision maker a few times. The rest only provide suggestions and inputs for the interventions provided."

"Well, if the final decision is made, I think it will still be taken by the doctor, especially if you need a referral. But as a nurse, I still convey the results of observation, intervention, and development of the injury."

"In some cases, the physiotherapist immediately takes over and decides whether the athlete can continue. I'm just helping with the initial action."

Theme 4: Practical challenges in the field

Subtheme 1: Limitations of equipment, facilities, and match locations

Most of the participants highlighted the limitations of medical equipment, supporting facilities, and match locations as the main challenges on the field. The location of the match is far from medical access or the lack of standard equipment is considered to worsen the situation in an emergency.

"We once had a task in pencak silat. So in the GOR there are four match arenas. So, for each of the two arenas, there is only one medical team. Our position in the middle, it's not ideal for us."

"In the past, I had experienced equipment limitations. So some of the consumables are not provided much by the committee."

"At that time, I experienced that the committee did not prepare an ambulance. Even though the event was a full day. Yes, fortunately there were no serious injuries, I'm afraid if it is used, it is not recommended that there is no one on standby anymore the ambulance."

Subtheme 2: Lack of human resources

The lack of medical personnel leads to a high workload for nurses. In fact, there are situations where nurses have to handle multiple roles at once due to the absence of an accompanying doctor or physiotherapist.

"Sometimes I was the only medical team there, there were no doctors or other medical personnel. So if there are two athletes injured at the same time, it's quite a hassle. I have to choose a worse one first. It doesn't feel ideal."

"I used to have a medical team, we only had two nurses for futsal matches. So we kept going back and forth because many people were injured at that time, so we didn't have time to rest."

Subtheme 3: Unclear authority of nurses

Some nurses admitted to experiencing role confusion due to the lack of a clear division of duties between professions in the medical team. This creates inefficiencies in decision-making and implementation of interventions.

"In some of my matches, the team was with a doctor, I didn't know for sure whether I could make the decision to evacuate or have to wait for the doctor. In the end, the handling became too late."

"How about yes, because in the field there is often no written SOP. So I just act on experience. If I'm wrong, I'm to blame. But if you don't act, it is considered unpredictable."

Theme 5: Expectations and recommendations for nurses

Subtheme 1: Special training and certification

The majority of participants emphasized the importance of formal training and specific certifications for nurses involved in the world of sports. They assessed that a systematic approach to competency development would increase the credibility and readiness of nurses in the field.

"So far, we have been learning by ourselves in the field. The provision is emergency skills, such as triage, installation of blinds, installation of cervical collars, RJP to the use of AEDs. But I think all those skills need to be refreshed."

"In my opinion, there should be special training on sports injuries, emergency handling, and field SOPs. Moreover, many studies have identified the type of sports injury in certain sports."

"Yes, of course, because certification is important, so that we are officially recognized. Not only is it considered a general practitioner who happens to join a sports team. There are nurses with special skills such as wound care, ICU, HD, hopefully there will be special certifications for us nurses involved in the world of sports"

Subtheme 2: Policy support for institutions and organizations

Participants hope that educational institutions, hospitals, nursing professional organizations, and sports institutions will begin to develop policies that support the role of sports nurses in a more structured and sustainable manner.

"Of course, with the number of nurses who are medical teams, at least one or two educational institutions that focus on this field. Because this is a great opportunity for nurses to develop and be better known."

"If there is support from professional organizations, such as PPNI, to develop sports nurses, there will be more people interested in entering this field. Right, they are also the ones who hold the policy"

"Well, maybe there can be a special career path for us nurses who often serve as medical teams or sports nurses."

Subtheme 3: Recommendations for sports nurses

As a closing reflection, several participants gave inspirational advice for nurses who want to be involved in the world of sports nursing. The participants emphasized the importance of mental readiness, speed of action, and the spirit of continuous learning.

"For your colleagues, don't be afraid to try the world of sports, I mean the olarhaga medical team. But you have to be physically and mentally ready. It's a quick job, not like in a normal treatment room."

"In my opinion, for colleagues, don't wait for perfection first before jumping. Precisely from field experience we will grow. And don't hesitate to ask for guidance from seniors and other medical professionals such as doctors and physiotherapists."

This study reveals the role of nurses in sports medical teams through five main themes based on participants' experiences, namely nurses' backgrounds and motivations, roles and responsibilities, interprofessional collaboration, practical challenges, and expectations and recommendations for the future. The first findings in the study are related to nurses' motivation which includes both personal and professional factors that drive them to be part of a sports medical team. Personal factors are more likely to be intrinsic factors related to interest in sports, whether as a former athlete, a fan, or just a hobby. Healthcare workers who have an interest in sports tend to be more satisfied and motivated in the task of being a sports medical team [14], [15], [16]. On the other hand, nurses who are involved in sports medical teams due to institutional duties defined by the workplace indicate that nurse involvement is incidental and has not yet become a structured career path. In fact, competency development is needed so that the involvement of nurses in the world of sports can be sustainable and professional [17]. For example, a study by [18] highlights the importance of the special role of skilled nurses as

cardiology nurses tailored to young athletes, particularly in the prevention and management of acute heart problems.

Nurses play a wide and dynamic role before, during, and after the game, including in maintaining the physical, mental, and social health of athletes, as well as in the prevention and management of injuries [19]. The findings in this study are in line with IOC guidance which emphasizes the importance of medical team readiness and timely and appropriate injury management [20]. Nurses also act as educators, providing information to athletes and coaches about the risk of injury and the importance of proper recovery. This educational role is essential to prevent recurrent injuries and protect athletes' careers, in accordance with nursing principles that focus on prevention and patient empowerment [21].

Interprofessional collaboration is the next finding in this study which is a crucial element, because the success of injury management is not only determined by individual competence, but also by the quality of communication, coordination, and division of roles in the team. This study found that open communication and mutual understanding of the roles of each profession are very important. However, some participants reported miscommunication, especially when working with a team that was new or had never worked together before. This is in line with the findings [22], which state that team familiarity and clarity of communication greatly influence the effectiveness of emergency response in sport. In addition, the study also highlights the importance of a collaborative culture and the division of authority according to authority will have better performance.

While good collaboration can improve medical response, this study reveals conditions on the ground that are often faced with practical challenges, including resource limitations, workloads, and unclear authority, as a key determinant factor in the quality of medical services provided during sporting events. These findings are in line with research [23], [24] that highlights gaps in sports emergency care systems in developing countries. WHO emphasizes the need for a standardized emergency care system, including the availability of tools, ambulances, and clear protocols [25]. Without comprehensive support, the performance of sports medical teams will encounter obstacles even though they have adequate competence.

The last theme in this study discusses the aspirations of nurses that lead to expectations and recommendations to increase capacity and professionalism in the field of sports nursing. The existence of training and certification programs will increase the competence, credibility, and motivation of nurses in carrying out their roles and duties [26]. Support in the form of the development of sports nursing curriculum, special career paths, and regulations that regulate the scope of nursing practice in sports medical teams will have a positive impact on the role of nurses in sports medical teams to contribute more optimally.

This study has limitations namely the scope of participants is geographically limited, In addition, this study does not involve perspectives from other professions involved such as doctors and physiotherapists. This results in a limitation of the overall perspective of the other professions involved. However, this research also has a novelty that this research has explored in depth the experience of nurses as a sports medical team. The results of this research can be used as a basis for curriculum development in educational institutions and organizational or government policies regarding sports nursing.

CONCLUSION

This study concludes that nurses are indispensable pillars within sports medical teams, fulfilling complex and dynamic roles that encompass acute injury management, health monitoring, athlete education, and interprofessional collaboration. Their contribution is fundamentally driven by a blend of personal passion for sports and professional dedication. However, the effectiveness of their role is significantly hampered by systemic challenges, including limited resources, unclear authority, and a lack of specialized training and recognition. To optimize athlete safety and care quality, it is imperative to establish structured support through the development of specialized certification programs, standardized operating procedures, and empowering policies from educational, professional, and sporting institutions. Formalizing sports nursing as a distinct specialty is the crucial next step to enhance professionalism, credibility, and the overall capacity of healthcare delivery in the sporting arena.

REFERENCES

Aghajani, Firouzeh, Tapeh, Zahra Asgari, Bahmani, Alireza, Golmohammadi, Maryam, & Vahed, Habib. (2022). Systematic Reviews of the Principles of Nursing and Medical Care in Fracture, Trauma and Nervous System Injury Units. *NeuroQuantology*, *20*(10), 1408–1429.

al Tunaiji, Hashel, Badtieva, Victoria, Dalkilinc, Murat, Kocak, Umut Ziya, Erbaş, Mehmet Can, Yargıç, Melda Pelin, Akıncı, Seren, Filiz, Serap Demir, Roberts, William Oliver, & Geertsema, Celeste. (2026). Medical planning for international games: a comprehensive checklist. In *Sports Physician Handbook* (pp. 811–836). Elsevier.

Barkley, Lisa, Taliaferro, Lindsay A., Baker, Kayla, & Garcia, Jeanette. (2018). The holistic athletic healthcare model: Addressing the developmental, social, and cultural needs of collegiate athletes. *Journal of Higher Education Athletics & Innovation*, *1*(3), 26–47.

Bijani, Mostafa, Abedi, Saeed, Karimi, Shahnaz, & Tehranineshat, Banafsheh. (2021). Major challenges and barriers in clinical decision-making as perceived by emergency medical services personnel: a qualitative content analysis. *BMC Emergency Medicine*, *21*(1), 11.

Bohström, Dan, Carlström, Eric, & Sjöström, Nils. (2017). Managing stress in prehospital care: Strategies used by ambulance nurses. *International Emergency Nursing*, *32*, 28–33.

Buettner, Jennifer, & Buettner, Jennifer R. (2021). *Fast Facts for the ER Nurse: Guide to a Successful Emergency Department Orientation*. Springer Publishing Company.

Coutts, Aaron J., Crowcroft, Stephen, & Kempton, Tom. (2021). Developing athlete monitoring systems: theoretical basis and practical applications. In *Recovery and Well-being in Sport and Exercise* (pp. 17–31). Routledge.

Garrett, Laurie. (2017). The challenge of global health. In *Global Health* (pp. 525–548). Routledge.

Horan, Dan, Kelly, Seamus, Hägglund, Martin, Blake, Catherine, Roe, Mark, & Delahunt, Eamonn. (2023). Players', Head Coaches', And Medical Personnels' Knowledge, Understandings and Perceptions of Injuries and Injury Prevention in Elite-Level

Women's Football in Ireland. *Sports Medicine-Open*, *9*(1), 64.

Kaur, Ms Navdeep, Kumar, Suresh, & Partap, Yash. (2025). Rehabilitation Strategies for Sports Injuries: A Multidisciplinary Perspective. *International Journal of Science, Architecture Technology and Environment*, *2*(5), 234–242.

Maragakis, Alexandros, Ham, Hannah, Bruni, Teryn P., Byrd, Michelle R., LaLonde, Leah, Neenan, Alexandra, Caserta, Abigail, & Turnier, Luke. (2021). Promoting a holistic family care model: Ethical and practical considerations for treating adult caregivers in integrated pediatric settings. *Clinical Practice in Pediatric Psychology*, *9*(2), 209–218.

Mountjoy, Margo, Moran, Jane, Ahmed, Hosny, Bermon, Stephane, Bigard, Xavier, Doerr, Dominik, Lacoste, Alain, Miller, Stuart, Weber, Alexis, & Foster, Jeremy. (2021). Athlete health and safety at large sporting events: the development of consensus-driven guidelines. *British Journal of Sports Medicine*, *55*(4), 191–197.

Pentecost, Claire, Richards, David A., & Frost, Julia. (2018). Amalgamation of Marginal Gains (AMG) as a potential system to deliver high-quality fundamental nursing care: a qualitative analysis of interviews from high-performance AMG sports and healthcare practitioners. *Journal of Clinical Nursing*, *27*(11–12), 2387–2402.

Rafailova, Lyudmila. (2021). *Features of nurse care and providing emergency care for patients with bleeding in the emergency department*. Ternopil.

Razu, Shaharior Rahman, Yasmin, Tasnuva, Arif, Taimia Binte, Islam, Md Shahin, Islam, Sheikh Mohammed Shariful, Gesesew, Hailay Abrha, & Ward, Paul. (2021). Challenges faced by healthcare professionals during the COVID-19 pandemic: a qualitative inquiry from Bangladesh. *Frontiers in Public Health*, *9*, 647315.

Rehberg, Robb, & Konin, Jeff G. (2024). *Sports emergency care: a team approach*. Taylor & Francis.

Sharma, Hritika, Baviskar, Ajit, Sippy, Nitin, & Kubal, Ninad. (2024). High-fidelity Simulation in Sports Field Emergencies: Applications, Benefits, Challenges, and Future Prospects. *Journal of Medical Academics*, *7*(1), 14.

Stanhope, Marcia, & Lancaster, Jeanette. (2015). *Public health nursing: Population-centered health care in the community*. Elsevier Health Sciences.

van Hattum, Juliette C., Verwijs, Sjoerd M., Senden, P. Jeff, Spies, Jessica L., Boekholdt, S. Matthijs, Groenink, Maarten, Panhuyzen-Goedkoop, Nicole M., Willems, Albert R., Knobbe, Ingmar, & Blom, Nicolaas A. (2022). The sports cardiology team: personalizing athlete care through a comprehensive, multidisciplinary approach. *Mayo Clinic Proceedings: Innovations, Quality & Outcomes*, *6*(6), 525–535.

Willson, Erin, Kerr, Gretchen, Battaglia, Anthony, & Stirling, Ashley. (2022). Listening to athletes' voices: national team athletes' perspectives on advancing safe sport in Canada. *Frontiers in Sports and Active Living*, *4*, 840221.