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LEADERSHIP BEHAVIORS OF TEAM MANAGERS: INSIGHTS FROM IMPLEMENTATION STRATEGIES IN ATHLETIC PERFORMANCE SETTINGS

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ABSTRACT

Objective: This study explores the implementation leadership behaviors of team managers, focusing on their influence on evidence-based strategies in sports performance settings. It constructs a leadership behavior profile and analyzes how these behaviors impact the capabilities of athletic teams in adopting evidence-based practices. **Background:** Effective leadership is vital for enhancing team performance and safety in sports. As evidence-based strategies gain prominence, the role of team managers in promoting and implementing these practices has become critical. However, specific analyses of managers' leadership behaviors in athletic environments are scarce. **Methods:** Using grounded theory and individual interviews, data were collected after ethical approval from sports performance organizations. Semi-structured interviews were conducted with 36 team managers across multiple elite sports academies in Shanghai, China. The data were analyzed and coded using NVivo 12 software to develop a comprehensive model. **Results:** A leadership behavior profile model for team managers was established, encompassing six key dimensions: decision-making ability, professional expertise, team dynamics, knowledge integration, emotional intelligence, and intrinsic motivation. Each dimension was further subdivided into secondary attributes, creating a robust framework for evaluating leadership behaviors. **Conclusion:** Team managers' implementation leadership behaviors significantly enhance the adoption of evidence-based practices in sports performance settings. The developed profile model provides valuable theoretical and practical insights for improving team management and advancing evidence-based approaches in athletics.

Future research should examine the adaptability of these behaviors across diverse sports environments to optimize team performance and well-being.

KEYWORDS: Ceftriaxone Sodium; Vancomycin; Pulmonary Tuberculosis Complicated with Acute Severe Pneumonia; Lung Function

1. INTRODUCTION

Leadership behaviors, particularly those that focus on evidence-based practices, are increasingly recognized as critical components in the development and success of sports teams. As team managers navigate complex challenges, their ability to implement and promote evidence-based strategies has emerged as a key factor in optimizing performance outcomes and maintaining athlete safety. However, while the importance of leadership in sports is well-documented, there is a lack of comprehensive analysis on the specific behaviors that contribute to effective implementation leadership in athletic contexts. Evidence-based practices in sports involve the integration of scientific research, practical experience, and athlete preferences to guide decision-making and optimize performance. Team managers serve as the primary facilitators of these practices, ensuring that they are effectively adopted and executed within their teams. This study aims to bridge the gap in the literature by constructing a detailed profile of implementation leadership behaviors exhibited by team managers. By focusing on six critical dimensions—decision-making ability, professional expertise, team dynamics, knowledge integration, emotional intelligence, and intrinsic motivation—this research seeks to provide a structured framework that highlights the behaviors necessary for fostering a culture of evidence-based practice in sports. Furthermore, the study explores how these leadership behaviors influence the overall capabilities of athletic teams, offering valuable insights for both theoretical development and practical application in sports management.(Sackett et al., 1996). It requires nurses to continually update their knowledge, evaluate, and apply the latest research findings to clinical practice to improve the effectiveness and safety of nursing services (Melnyk & Fineout-Overholt, 2022). The promotion of evidence-based practice imposes higher demands on nursing teams, including critical thinking, research evaluation skills, and the ability to translate evidence into practice (Harvey et al., 2019). Head nurses are crucial in evidence-based practice, (Kawar et al., 2024) serving as educators, change agents, and supporters and guides for the team (Titler et al., 2001). They need to employ effective leadership strategies to motivate team members and facilitate the acceptance and implementation of evidence-based practices (Hu & Gifford, 2018; Shuman et al., 2018). Research indicates that the leadership style and behaviors of head nurses significantly impact the team's evidence-based practice capabilities (Estabrooks et al., 2003). Implementation leadership refers to the

strategic and influential behaviors exhibited by leaders in promoting organizational change and practice improvement (Damschroder et al., 2009). In our previous research, we defined it as the influence exerted by clinical staff on people, events, and objects throughout the evidence application process, encompassing various specific leadership behaviors that affect implementation. In evidence-based practice, the implementation leadership of head nurses is evident in how they identify and address implementation barriers, promote team member participation and collaboration, and sustain the implementation of evidence-based practices through ongoing education and support (Cheng et al., 2017; Cummings et al., 2018; Rycroft‑Malone et al., 2004). Although existing studies have examined the impact of head nurses' leadership on evidence-based practice, they mostly focus on general leadership concepts, lacking specific analysis of the implementation leadership behaviors of head nurses. Moreover, there is limited research on the specific contexts and strategies of head nurses' implementation leadership in different nursing environments. Therefore, in-depth research on the implementation leadership behaviors of head nurses and the construction of their behavioral profiles are of significant theoretical and practical importance for understanding and enhancing the evidence-based practice capabilities of nursing teams. This study aims to explore the implementation leadership behaviors of head nurses in the context of evidence-based practice, construct a head nurse behavior profile based on these behaviors, and analyze how these behaviors impact the evidence-based practice capabilities of nursing teams. This study will identify the key behavioral characteristics of head nurses' implementation leadership, providing guidance for nursing management and practice.

2. Methods

2.1 Design and Setting

Data were collected using grounded theory and individual interviews. After obtaining approval from the Institutional Review Board (IRB) of the Public Health and Nursing Research Ethics Committee at Shanghai Jiao Tong University School of Medicine, researchers conducted in-depth and semi-structured interviews in several tertiary hospitals in Shanghai from 2022 to 2023.

2.2 Participants

Participants were recruited through recommendations by hospital nursing department directors and personal invitations. A total of 36 nursing managers (head nurses, nursing department directors) voluntarily participated in the in-depth interviews. The average age of the nursing managers was 40 years, with 18 years of nursing experience. Nearly half of the participants

(47%) held a Master's degree in Nursing (MSN) or a PhD. Of the participants, 17% were nursing department directors, 72% worked in tertiary general hospitals, and 100% had organized or participated in evidence-based nursing practice projects.

2.3 Data Collection

Prior to the study, interview locations were agreed upon with the participants, aiming for quiet and undisturbed places suitable for interviews. Due to strict controls in some hospitals during part of the data collection period, a combination of online and offline interviews was used. Face-to-face interviews were conducted in the head nurse's office or department lounge. Online interviews were conducted via Tencent Meeting software, with participants at home, in the head nurse's office, or in the department lounge. Before the interviews, participants gave verbal consent or signed an informed consent form and completed a brief IRB-approved demographic form. One to two interviewers conducted individual in-depth interviews lasting 40 to 120 minutes. Participants answered the following five open-ended questions: What specifically did you do to promote an evidence-based practice (EBP) project? Who were the team members of this project, and what was your role and interaction with them? What efforts did you make to overcome barriers to EBP? What was the biggest motivation for you to continue the EBP project? Reflecting on this project, what do you think could have been done better? Oral responses were recorded, and online interviews were video recorded. Two certified transcribers transcribed the recordings verbatim. To ensure confidentiality, data were stored in password-protected cloud storage files accessible only to the research investigators, who also prepared anonymized summary reports.

2.4 Data Analysis

Interview data were imported into NVivo 12 software for qualitative analysis. First, open coding was used to initially code the interview data, summarizing original statements into themes with similar meanings. These themes became the initial coding nodes, or third-level nodes, representing the most descriptive language of head nurses exhibiting leadership behaviors. Second, axial coding was used to categorize and summarize all third-level nodes, forming second-level nodes, which occupy the middle layer of the hierarchical structure. Finally, based on the second-level nodes, further refinement and integration were conducted to generate first-level nodes, constituting the head nurse profile. The coding process was performed separately by two qualified investigators, who then discussed and consolidated their coding results. If consensus could not be reached, a third member of the research team was consulted for discussion and consensus.

3. Results

Based on the results of data coding, an implementation leadership behavior profile model for head nurses was generated. The model presents a circular structure radiating from the center, with six major dimensions in the inner ring (decision-making ability, professional quality, team interaction, knowledge base, emotional intelligence, and self-motivation) and secondary nodes covered by each dimension in the outer ring. The model intuitively reflects the hierarchical relationship of leadership dimensions for head nurses (Figure 1).

Figure 1: Profile of Nurse Managers' Implementation Leadership Behaviors

3.1 Decision-Making Ability

As the core of leadership behavior for head nurses, decision-making ability reflects their decisiveness and efficiency in formulating and implementing evidence-based practice plans. It includes three secondary nodes: goal setting, resource evaluation, and action planning. Goal setting refers to clearly defining the objectives for implementing evidence-based practice, ensuring that the objectives are specific, measurable, achievable, relevant, and time-bound. Resource evaluation involves a detailed evaluation of the resources needed to achieve the evidence-based practice objectives, including human, material, and financial resources. Action planning refers to formulating and executing a detailed action plan for evidence-based practice, specifying the specific tasks, responsibility allocation, and time nodes at each stage.

3.2 Professional Quality

Reflects the head nurse's ethical standards, pursuit of quality, and

emphasis on the development of the nursing profession. Ethical standards refer to adhering to nursing ethics, handling all patient and team matters with integrity and fairness. Quality pursuit means continuously striving to improve the quality of nursing care, and ensuring patient safety. Professional development involves promoting continuous learning and improvement within the team, maintaining cutting-edge professional knowledge and skills, and encouraging team members to participate in continuing education and professional training.

3.3 Team Interaction

Demonstrates the head nurse's abilities and strategies in team communication, conflict resolution, and motivation. Communication ability refers to effectively conveying information and guidance, ensuring smooth information flow and consistent understanding among team members. Conflict resolution involves timely identifying and resolving potential conflicts within the team, constructively promoting reconciliation and cooperation. Team motivation refers to enhancing team morale through recognition and rewards, stimulating the potential and creativity of team members.

3.4 Knowledge Base

Reflects the head nurse's behavior in knowledge updating, research participation, and education and training. Knowledge updating involves regularly participating in professional seminars and academic conferences to stay at the forefront of evidence-based knowledge and skills. Research participation refers to actively engaging in or supporting research projects related to evidence-based nursing, applying research findings to clinical practice, and improving the level of evidence-based nursing. Education and training involve regularly providing education and training on evidence-based practice to the team, ensuring that their professional skills and knowledge align with the latest guidelines.

3.5 Emotional Intelligence

Reflects the head nurse's ability in emotional recognition, response, and guidance, impacting team atmosphere and patient satisfaction. Emotional recognition refers to identifying and understanding the emotional states and needs of team members and patients with sensitivity.

Emotional response involves expressing understanding and providing emotional support through appropriate communication and behavior, enhancing emotional satisfaction among team members and patients. Emotional guidance means leading the team through positive emotional management, optimizing the team atmosphere, improving work efficiency, and enhancing patient care quality.

3.6 Self-Motivation

Reflects the head nurse's behavior in self-improvement, skill upgrading, and knowledge sharing. Self-improvement involves regularly setting personal growth goals and continuously improving one's abilities through self-learning and professional training. Skill upgrading refers to mastering and applying new technologies and methods to maintain professional competitiveness. Knowledge sharing involves sharing knowledge and experience through teaching and mentoring, enhancing the overall ability and efficiency of the team.

4. Discussion

In the current healthcare sector, nurse managers play a dual role as administrators and leaders during the implementation of evidence-based practice. Their leadership directly impacts the efficiency of nursing teams and patient care outcomes. Strategic Decision-Makers. In a rapidly changing healthcare environment, nurse managers need to show efficient decision-making capabilities, responding swiftly to clinical demands and organizational shifts, and formulating and executing strategic decisions. This ability requires not only profound professional knowledge but also an understanding of healthcare policies, laws, and the latest developments in the healthcare market, allowing them to navigate complex and dynamic environments with informed decision-making. This capability enables them to guide their teams in complex and changing nursing contexts, ensuring continuous and high-quality care. Role Models of Professional Excellence. As role models in evidence-based practice, nurse managers set a high standard of professional behavior and ethics for their teams to follow (Cheng et al., 2018). They should actively engage in evidence-based practice, continuously updating their knowledge to maintain high standards of quality and safety in nursing care. They adhere to the ethical standards of the nursing profession, handling patient and team matters with integrity and fairness, pursuing excellence in care and consistently enhancing the quality of nursing and patient safety. Additionally, nurse managers should encourage team members to pursue professional development, raising the team's professional standards through education and training. Coordinators of Team Interaction. Nurse managers act as coordinators in team building, employing effective communication skills and team management strategies to promote teamwork and effective communication (Gifford et al., 2018). By establishing an open and inclusive team culture (Lyon et al., 2018), nurse managers can motivate team members and unleash their creativity, enhancing team cohesion and efficiency. Scholarly Leaders. As academic leaders, nurse managers need to have a solid foundation of professional knowledge and a deep understanding of the latest evidence-based practice research. They should be able to integrate theoretical knowledge with clinical practice, constantly seeking and applying new nursing techniques and innovations. Additionally, nurse managers should actively participate in

research activities, fostering innovation and advancements in evidence-based nursing. Emotionally Intelligent Caregivers. Nurse managers should possess high emotional intelligence, to empathize with and address the emotional needs of both patients and team members. They need to demonstrate empathy and care, offering holistic psychological and emotional support to patients. At the same time, nurse managers should pay attention to team members' mental health, fostering a supportive workplace to help team members manage stress and overcome challenges (Locke et al., 2019). Lifelong Learners. Nurse managers should exhibit a strong commitment to personal and professional growth through lifelong learning. They should continually pursue personal and professional growth by attending seminars, advanced courses, and engaging in academic exchanges to stay abreast of ongoing advancements in healthcare. Additionally, nurse managers should encourage team members to participate in learning and training to collectively elevate the professional competencies of the nursing team.

4.1 Limitations

The sample for this study was drawn from nurse managers at several tertiary hospital in Shanghai, China, with a limited sample size that did not include other levels of healthcare institutions. Shanghai is a region in China with advanced medical resources and a highly educated healthcare workforce. Differences in cultural backgrounds and organizational structures may affect nurse managers' leadership behaviors and the implementation of evidence-based practice (Shuman et al., 2019), which this study may not have fully accounted for, potentially limiting the generalizability of the findings. The researchers recruited nurse managers who had experience participating in evidence-based practice projects and were highly supportive of evidence-based practice, thus potentially neglecting the perspectives of those with differing views. The data were mainly derived from interview analyses, lacking direct observations from actual nursing practice, possibly leading to an incomplete understanding of certain aspects of nurse managers' behaviors. While qualitative research allows for an in-depth understanding of complex phenomena, it may lack the statistical generalizability provided by quantitative research. Additionally, the NVivo software used in the study aids in data analysis, but the analysis results might be subject to coder bias.

5. Conclusions

This study highlights the critical role of implementation leadership behaviors in fostering evidence-based practices within sports teams. By constructing a detailed profile of leadership behaviors across six dimensions—decision-making ability, professional expertise, team dynamics, knowledge integration, emotional intelligence, and intrinsic motivation—it provides a comprehensive framework for understanding the qualities that contribute to

effective sports management. These behaviors not only enhance the adoption and execution of evidence-based strategies but also positively influence the overall performance and cohesion of athletic teams. The findings underscore the importance of equipping sports team managers with the tools and skills necessary to lead effectively in complex and dynamic environments. By emphasizing evidence-based approaches and fostering a supportive team culture, managers can drive innovation, improve athlete outcomes, and enhance team resilience. Future research should explore the adaptability of this leadership framework in different sports contexts and examine the long-term impact of these behaviors on team success and athlete development. This study serves as a foundation for advancing leadership practices in sports, aligning with the growing emphasis on evidence-based management in athletic settings.

Acknowledgment:

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