

## Sources of innovation in nursing: implications for care practice and the development of new business models

## Fontes de inovação na enfermagem: implicações para a prática assistencial e o desenvolvimento de novos modelos de negócios

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### ABSTRACT

This article investigates the origins of innovation in nursing, based on Schumpeter's theory (1934), and its application in healthcare practice and the development of new business models. This is a theoretical study based on a narrative literature review, in which three main sources of innovation in nursing were identified: the introduction of new products, the application of innovative production techniques, and the exploration of new markets. The advent of new products, such as assistive technologies, has revolutionized nursing practice, enhancing the quality of patient care. The application of innovative techniques in the structuring and delivery of healthcare services has improved assistance processes, while the exploration of new markets, such as the adoption of telemedicine, has expanded access to care, particularly in remote areas. The study highlights the need for stronger institutional support to foster innovation in nursing, considering the obstacles professionals face, such as the lack of understanding of the patenting process. It concludes that technological innovation, combined with creativity and interdisciplinary collaboration, is essential to transforming nursing and the healthcare system as a whole.

**Keywords:** innovation. nursing; technological innovations; healthcare management; elderly assistance.

### RESUMO

Este artigo investiga as origens da inovação na enfermagem, com base na teoria de Schumpeter (1934), e sua aplicação na prática assistencial em saúde e no desenvolvimento de novos modelos de negócios. Trata-se de um estudo de

natureza teórica, baseado em revisão narrativa da literatura, no qual foram identificadas três principais fontes de inovação na enfermagem: a introdução de novos produtos, a aplicação de métodos inovadores de produção e a exploração de novos mercados. O advento de novos produtos, como as tecnologias assistivas, revolucionou a prática da enfermagem, elevando a qualidade do cuidado ao paciente. A aplicação de técnicas inovadoras na estruturação e prestação dos serviços de saúde aprimorou os processos assistenciais, enquanto a exploração de novos mercados, como a adoção da telemedicina, ampliou o acesso ao cuidado, especialmente em áreas remotas. O estudo destaca a necessidade de maior apoio institucional para fomentar a inovação na enfermagem, considerando os obstáculos enfrentados pelos profissionais, como a falta de conhecimento sobre o processo de patenteamento. Conclui-se que a inovação tecnológica, aliada à criatividade e à colaboração interdisciplinar, é essencial para transformar a enfermagem e o sistema de saúde como um todo. **Palavras-chave:** inovação; enfermagem; inovações tecnológicas; gestão em saúde; assistência ao idoso.

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## 1 INTRODUCTION

Innovation in the field of nursing is essential for enhancing the quality of healthcare services, adapting to the emerging demands of patients, and addressing changes in the healthcare landscape. The adoption of innovative technologies, evidence-based practices, and patient-centered strategies plays a crucial role in advancing nursing practice. According to Silva and Machado (2020), nursing holds a significant role in Brazil's Unified Health System (SUS), and is vital for the introduction of innovations aimed at improving healthcare services.

The origins of innovation in nursing are diverse, encompassing scientific research, clinical practice, patient needs, and health policies. The combination of these sources enables the development of innovative solutions that meet the specific demands of the sector. Frota et al. (2020) emphasize the importance of education and professional management in nursing to address the challenges posed by new labor scenarios, underscoring the need for educational innovation to prepare professionals capable of functioning in complex and globalized environments.

Additionally, interdisciplinary cooperation and the direct involvement of nurses in administration and decision-making processes are essential to fostering innovation. Machado et al. (2020) highlight the challenges faced by Brazilian nursing in the labor market and regulatory processes, suggesting that innovation is crucial for overcoming these obstacles and enhancing professional practice.

Innovation in nursing serves as a differentiating factor, playing a pivotal role in responding to emerging population needs and improving the quality of care. Studies highlight the significance of initiatives that implement evidence-based practices and innovative strategies, such as mobile clinics and services targeting populations with limited access to primary care, demonstrating how new care models can expand healthcare access (Breton et al., 2024).

The sources of innovation are varied, ranging from knowledge promotion and user-driven needs to large-scale customization and design-driven innovation. These sources are categorized into frameworks that facilitate the understanding of how innovation can be stimulated and implemented in different settings, including healthcare and, in particular, nursing (Tidd & Bessant, 2015).

Nursing employs research and evidence-based practice as key drivers of innovation. Studies such as that by Oliveira et al. (2021) indicate that the creation of new clinical protocols and technologies in nursing practice is directly influenced by advancements in scientific knowledge.

Tidd and Bessant (2015) emphasize that innovation often arises from the identification of specific user needs. In the context of nursing, Frota et al. (2020) point out that the rise in chronic diseases and the growing demand for personalized care have driven new approaches in clinical practice, such as home care models and remote monitoring programs.

Schumpeter (1934) identified five primary sources of innovation: the introduction of new goods or significant product improvements, the implementation of innovative production methods, the opening of new markets, the discovery of new sources of raw materials, and the creation of new organizations or business models. These categories form the foundation for understanding the origins and impacts of innovation across various sectors, including nursing, by offering tools to transform practices and services.

To support this perspective, Tidd and Bessant (2015) broaden the understanding of innovation sources by incorporating market and industry transformations, technological advances, demographic and social changes, and new knowledge bases. They argue that innovations can emerge from shifts in consumer preferences, institutional interactions, and internal and external factors that reshape products and services. These principles highlight the importance of an integrated strategy to identify and seize opportunities, particularly in healthcare, where needs are dynamic and diverse.

Given the above, it is evident that innovation in nursing is critical for improving the quality of healthcare services, adapting to emerging patient needs, and addressing shifts in the health sector. In this context, the following research question emerges: what are the most relevant sources of innovation in nursing, and how can they be employed to foster progress in professional practice? This theoretical reflection aims to examine the key sources of innovation identified in the literature and discuss their applicability to nursing, emphasizing practical and theoretical contributions that can guide strategies for improvement within the healthcare field.

## 2. METHODOLOGY

This study is characterized as a theoretical essay grounded in a narrative review of national and international literature. The search included classical works by Schumpeter, as well as recent articles on innovation in nursing and health management. The data were analyzed qualitatively, seeking to identify thematic categories that supported the reflection on the main sources of innovation in nursing.

## 3. RESULTS

The review made it possible to identify three central categories of innovation in nursing: (1) the introduction of new products, such as assistive technologies and telemedicine; (2) the application of innovative production methods, such as care and management protocols; and (3) the opening of new markets, including new business models and nursing entrepreneurship.

In addition, the analysis highlighted that these categories are interconnected, reinforcing that innovation in nursing does not occur in isolation but rather as a dynamic process shaped by technological advances, organizational changes, and social demands. The literature showed that new products are often accompanied by adjustments in care protocols and service management, while the expansion into new markets frequently relies on both technological and organizational innovations. These results indicate that innovation in nursing emerges as a multifaceted phenomenon, requiring institutional support and interdisciplinary collaboration to be effectively implemented.

## 4. SOURCES OF INNOVATION AND THEIR APPLICATION IN NURSING

Academic research on innovation in nursing has been extensive, highlighting its role in both care and organizational practices. Studies have examined the integration of emerging technologies, the use of innovative methods, and the customization of solutions tailored to patients' specific needs, emphasizing the strategic importance of nursing in transforming healthcare systems (Gonçalves & Ramos, 2019; Silva & Pereira, 2020; Carvalho & Silva, 2020; Oliveira & Santos, 2021; Freitas & Costa, 2021).

This comprehensive approach demonstrates the increasing significance of innovation as a means to enhance the effectiveness, safety, and quality of care within a global context of complex challenges and continuous transformations. Technological innovation in nursing is defined as the use of scientific knowledge to improve healthcare delivery, diagnosis, treatment, and patient prognosis. Innovation is not limited to products or devices but also encompasses the development of new processes and protocols aimed at achieving excellence in care. Therefore, innovation is viewed as a process that goes beyond the use of technologies, incorporating professionals' creativity in identifying needs and seeking solutions (Avelar & Santos, 2020; Aquino et al., 2010).

The incorporation of technology and innovation within the healthcare and nursing sectors can improve quality of life, care efficiency, new care techniques, and equipment availability, generating positive effects for individuals and communities (Primo & Furieri, 2019). Graduate nursing

programs, particularly professional master's degrees, play a notable role as sources of innovation. These programs provide a platform for nursing professionals to actively engage in research and the development of innovative solutions, encouraging greater involvement in creating new technologies and products for healthcare. However, studies also emphasize the challenges nurses face, such as a lack of understanding of the patenting process and insufficient institutional support for technological innovation, factors that hinder the development and recognition of nursing innovations (Regis & Silva, 2020).

In recent years, technological innovations in healthcare have undergone methodological advancements, increasing their impact on the scientific community and among healthcare administrators. As an institutionalized practice, technological innovation aims to identify and clarify criteria that assist in allocating limited resources under specific circumstances. Based on the concept of scientific and technical rationality, it prioritizes evidence-based practices, establishes evaluation standards, and implements "standardized" methods in processes to create socially legitimate conditions for overcoming conflicts of interest in healthcare technology implementation (Angelis, Lange, & Kanavos, 2018).

The origins of innovation in nursing are closely tied to the use of educational technologies, which have revolutionized how nursing professionals and students engage in learning and clinical practice. There is an increasing reliance on digital technologies, such as online platforms and high-precision simulators, particularly in nursing education, promoting a more interactive and effective learning experience. However, a limiting factor in the use of these technologies is the to adapt to new methodologies, which may face resistance from some educators and require additional training and resources. Nevertheless, the advantages, such as increased student interaction and enhanced decision-making and critical-thinking skills, underscore the growing importance of technological innovation in both nursing education and clinical practice (Araújo-Girão et al., 2020).

In the context of nursing, sources of innovation can be associated with various technologies that significantly impact care practices. These technologies are categorized into three main types: soft, soft-hard, and hard technologies. Each category plays a crucial role in enhancing healthcare delivery. Soft technologies, which include elements like establishing trust and empathy, directly influence the quality of nurse-patient interactions. In contrast, hard technologies, such as medical devices and management systems, are essential for improving processes and ensuring precision in care delivery (Pereira et al., 2012).

Soft technologies are associated with relational aspects of care, such as communication and empathy, which are critical for fostering a compassionate connection between nurses and patients. Soft-hard technologies encompass the technical and scientific knowledge applied in care, including the models and theories that underpin nursing practice. Lastly, hard technologies include physical tools, such as medical equipment and technological devices, that are indispensable for delivering care. These three categories are interconnected and, when combined, ensure efficient and comprehensive care in nursing practice (Silva, Alvim, & Figueiredo, 2008).

For the effective use of technology in nursing, it is essential to maintain a balance between these tools and a humanized approach to care, ensuring that technology integrates with rather than overshadows patient care. Continuous reflection on the incorporation of technology into daily nursing practice is crucial for improving the quality of care and implementing innovations that meet the needs of both patients and healthcare teams (Pereira et al., 2012).

Based on Schumpeter's (1934) theoretical reflection, this article presents the main categories of innovation sources identified in the nursing literature. These include the introduction of new products, the application of innovative production methods, and the opening of new markets. The implementation of new products in nursing involves the development and

adoption of technologies that address specific healthcare needs, thereby enhancing the quality of services. The application of innovative production methods entails the development of new processes, protocols, and strategies to improve the efficiency and effectiveness of care. Meanwhile, the exploration of new markets focuses on expanding access to nursing care through creative solutions in new geographic or demographic regions. These innovation sources contribute to transforming nursing practice, making it more dynamic, accessible, and responsive to current healthcare demands.

## 5. INTRODUCTION OF NEW GOODS

According to Schumpeter (1934), one of the primary sources of innovation is the introduction of new products or significant improvements to existing ones. In his theory of creative destruction, such innovations act as driving forces that disrupt the existing economic equilibrium, generate new markets, increase productivity, and eliminate obsolete technologies or products.

In Schumpeterian thought, the introduction of new products or improvements is not limited to the technical or functional aspects of innovation but extends to its economic and social consequences. Schumpeter argues that such advancements are often driven by entrepreneurs-visionaries who can recognize opportunities, mobilize resources, and take risks to implement innovative solutions in the market. These innovations significantly affect consumption patterns, intensify competition, and reshape market structures.

Schumpeter also differentiates between incremental and radical innovation. While incremental innovation involves continuous improvements to existing products, radical innovation introduces entirely new and revolutionary concepts. Both forms play complementary roles in economic progress: incremental innovation promotes efficiency and competitiveness, whereas radical innovation paves the way for new industries and markets (Santos, Fazon, & Meroe, 2012).

Given this, Schumpeter's theory highlights that innovation does not occur in isolation but rather within a dynamic environment involving interactions among businesses, consumers, governments, and research institutions. In healthcare, nursing work is frequently associated with organizational technologies and is closely connected to individuals, their families, and the broader community.

Understanding the connection between nursing and innovation requires a scientific foundation that expands the perspectives of this debate. This understanding facilitates both research and practical action by nurses in technologically advanced settings, supporting improved care delivery and promoting advancements in human health, especially in the face of imminent and revolutionary changes (Ferreira et al., 2020).

In this context, research indicates that creativity plays a crucial role in the innovation process, serving as a fundamental skill for seeking innovative solutions and continuous improvement. According to Feldman et al. (2008), creativity, combined with knowledge and competence, is a strategic resource that enables nurses to develop innovative methods, enhance existing practices, and adapt to challenging healthcare environments. Many healthcare organizations striving for quality have recognized that their potential for growth lies in human capital (Barret, 1998). Thus, recognizing human capital as a driver of organizational growth emphasizes the transformative role of creativity in this process.

Creativity often emerges from a lack of alternatives or from dissatisfaction with existing options. It disrupts the status quo by creating new paths and causing shifts in previously stable systems. This is why creative individuals are highly valued, although they are often misunderstood, criticized, or even marginalized.

While creativity and innovation may cause discomfort by challenging established norms, they also open doors to progress and improvement (Alencar, 2002; Mussak, 2003). Christensen (1997) supports this concept, demonstrating



how disruptive innovations often originate from seemingly modest solutions that, by addressing neglected needs or new market segments, can transform entire industries. This principle underscores the importance of creativity as a strategic competency for identifying hidden opportunities and turning obstacles into significant advances.

Moreover, Amabile (1983) emphasizes that creativity forms the basis for discovering novel approaches, enabling the creation of concepts that challenge the status quo and generate value through innovation. These perspectives highlight that creativity is not merely an ephemeral inspiration but rather a structured and essential element in the process of disruptive innovation.

Feldman et al. (2008) assert that "creativity and innovation are key elements for organizational improvement and for nursing to develop alternatives to solve professional challenges." Innovation in nursing, driven by creativity and disruptive innovation principles, serves as a crucial tool for confronting current healthcare challenges. Schumpeter's theory, combined with the insights of authors such as Feldman, Christensen, and Amabile, illustrates that creativity is not merely an attribute but a strategic necessity. It enables the identification of innovative solutions, the adaptation to complex contexts, and transformation of care practices.

In nursing, creativity and innovation not only encourage the continuous improvement of practices but also foster structural changes in the healthcare system, enhancing the effectiveness, safety, and quality of patient care. Therefore, recognizing and investing in the creative capacity of healthcare professionals is essential for achieving sustainable advancements and meeting the needs of a constantly evolving global context.

## 6. IMPLEMENTATION OF INNOVATIVE PRODUCTION METHODS IN NURSING

In nursing, the application of innovative production methods goes beyond merely incorporating new technologies or processes. It involves restructuring organizational and care practices to address emerging needs more efficiently. Schumpeter (1934) emphasized that innovation in production methods occurs when organizations discover ways to convert existing resources into more impactful results, often challenging previously established paradigms.

According to Tidd and Bessant (2015), applying innovative production methods entails implementing new processes or significantly modifying existing ones to enhance efficiency, reduce costs, or provide greater value to customers. This type of innovation encompasses not only technological advancements but also organizational, managerial, and cultural changes that facilitate the effective adoption and implementation of these innovations. It is a crucial component for the success of organizations seeking to adapt and thrive in competitive environments.

Freeman (1982) reinforces this perspective by highlighting that process innovation reflects an organization's capacity to acquire and utilize new knowledge. He argues that successful implementation requires coordinated efforts across various organizational levels, from strategic planning to operational execution. Technological advancements frequently drive innovative production methods, necessitating changes in work systems and production processes to maximize results.

Pavitt (1984) asserts that the application of innovative methods is inherently cooperative and interconnected, involving interaction across multiple sectors and the transfer of knowledge among participants in the production process. He emphasizes that companies investing in research and development (R&D) and building collaborative networks are better equipped to incorporate these innovations, leading to increased productivity and quality.

Furthermore, Tidd and Bessant (2015) stress that the successful implementation of innovative production methods is linked to the development of an organizational culture that prioritizes continuous learning and active employee participation. They note that resistance to change is one of the

greatest challenges organizations face and that strategies such as transparent communication, training, and team involvement are essential for overcoming these obstacles.

The application of innovative production methods underscores the importance of balancing technological and organizational advancements with a strategic and collaborative approach. In healthcare, particularly in nursing, a new perspective is required. Various research models have been considered, and while basic research is indispensable, there must also be a focus on practical applications for the future. These investigations provide a foundation for innovation research, which is increasingly anticipated (Reichembach & Pontes, 2020).

Aquino et al. (2010) emphasize that the concept of technology and its branches, such as technological innovation, is not limited to products or technical instruments. The authors argue that tools and machines, on their own, have no inherent purpose; rather, it is the execution of human work, guided by a technological model of action and influenced by specific social relationships, that gives these tools intentional meaning.

Reflecting on technological innovation in healthcare, particularly in nursing, involves routine activities developed by specialists to achieve the best outcomes for patients and their families. Healthcare experiences across hospital, outpatient, home, and community settings encompass a range of situations, experiences, and knowledge that serve as an inexhaustible source of learning (Avelar & Santos, 2020).

Moreover, Fleischer et al. (2015) highlight that the sustainability of healthcare innovations depends on factors such as adaptation to local needs, institutional support, and the ongoing engagement of stakeholders. These elements are critical for ensuring that innovations can be expanded and be maintained in various contexts, facilitating the exploration of new markets and improving access to healthcare services.

Technological innovations incorporated into nursing practice can enhance both time and resource efficiency while also raising the quality of patient care (Souza, Silvino, & Souza, 2020). Capezuti et al. (2013) discuss an innovative model aimed at improving the care of hospitalized elderly patients through the implementation of evidence-based practices, continuous nurse training, and strategies for organizational adaptation. This model promotes significant changes in care delivery, optimizes patient outcomes, and illustrates the application of innovative techniques in nursing.

By increasing the efficient use of time and resources, technological innovations also create opportunities for implementing more specific and personalized solutions. Assistive technologies, often developed with the active collaboration of nurses, have played a transformative role in clinical practice. These innovations expand the scope of care and enable interventions that are better aligned with the individual needs of patients (Aquino et al., 2010).

In conclusion, the adoption of innovative production methods in nursing serves as a strategy to improve processes, enhance outcomes, and respond more effectively to the emerging needs of the healthcare sector. This methodology, rooted in solid theories such as those of Schumpeter (1934), Tidd and Bessant (2015), Freeman (1982), and Pavitt (1984), underscores the importance of integrating technological progress within organizational structures that promote continuous learning and collaboration.

Consequently, nursing practice, enriched by innovations and technologies, exemplifies the practical implementation of these principles, highlighting the role of nurses as essential catalysts for change. The combination of technology, care practices, and applied research emerges as a vital response for improving care quality and addressing the challenges of an ever-evolving healthcare environment.

## 7. OPENING NEW MARKETS



According to Schumpeter (1997), innovation occurs when a company introduces its products or services into previously unexplored markets, whether those markets already exist or are newly created. This strategy enables organizations to expand their customer base and diversify revenue streams, contributing to economic development and competitiveness.

Tidd and Bessant (2015) emphasize that entering new markets is not limited to territorial expansion but also includes identifying untapped market niches and developing demand for innovative products. They highlight that this strategy requires a deep understanding of customer needs and the ability to tailor products to meet emerging demands. Breton et al. (2024) describe the implementation of organizational innovations, such as multidisciplinary and mobile clinics, to improve access to primary care services for patients without a regular healthcare provider, exemplifying the introduction of new services in the healthcare sector.

Kotler (1967) asserts that entering new markets requires a thorough understanding of consumer needs, desires, and attitudes. He emphasizes that standardized marketing tactics may be ineffective if they are not adapted to the cultural, social, and economic particularities of each region. Kotler argues that companies that invest in market research and segmentation are more likely to succeed, as they can adjust their strategies to meet local consumer expectations, thereby increasing acceptance and competitiveness. This perspective underscores that cultural awareness and strategic adaptability are fundamental components of innovation aimed at market expansion.

Furthermore, Porter (1980) introduces the "Five Forces" model as a tool for analyzing market competition dynamics. Within this framework, Porter highlights that entering new markets can be an effective tactic for mitigating intense competition in saturated sectors. He argues that by moving into less competitive or emerging markets, companies can reduce competitive pressures while identifying new opportunities for growth and profitability. This strategy not only diversifies risk but also generates competitive advantages by addressing unmet needs and establishing a pioneering presence in these markets. The exploration of new markets in the healthcare sector is frequently discussed in the scientific literature, emphasizing the importance of innovation and adaptability to evolving needs. Recent research examines how technological advancements have expanded healthcare services to previously underserved regions, with telemedicine emerging as a crucial tool for reaching remote communities and improving access to healthcare (Novaes & Soárez, 2020).

Silva et al. (2023) investigated the entry of biotechnology institutions into emerging markets, focusing on strategies such as public-private partnerships and investments in research and development to meet the specific demands of these markets. They highlight that technological innovation in healthcare involves applying scientific and technological knowledge to solve problems across various fields, leading to improvements in diagnosis, treatment, and prognosis. This results in cost savings, professional support, and enhanced care processes.

A recent example of challenges in the healthcare sector was the COVID-19 pandemic, which exposed significant vulnerabilities in global health systems and underscored the lack of adequate planning and management. However, new opportunities also arose for entrepreneurs in the healthcare field, who began adopting innovative strategies such as viewing healthcare through a life-cycle lens and emphasizing lifestyle-centered medicine. They also implemented strategies like the Blue Ocean approach to move away from direct competition. This context provides innovators with the opportunity to develop unique solutions that efficiently address emerging healthcare demands (Aveni, 2020).

The Blue Ocean Strategy, developed by Kim and Mauborgne (2005), proposes an innovative business approach aimed at establishing new market niches where competition is minimal. Instead of competing in saturated markets (red oceans), the strategy focuses on identifying and exploiting areas that have

not yet been explored by consumers, offering unique products or services that address previously unmet needs.

In this context, the Blue Ocean Strategy is closely linked to innovation, as it seeks to open new markets rather than compete in overcrowded ones. This perspective highlights the importance of innovation as a way to add value for customers by providing exclusive products or services that fulfill unmet needs. By adhering to the Blue Ocean approach, organizations can differentiate themselves by establishing areas with little competition, where innovation becomes the driving force for exploring new growth opportunities and securing a unique market position (Aquino, Chaves, & Bezerra, 2021).

In the healthcare sector, this strategy has proven particularly effective, driven by the growing demand for accessible and efficient solutions. By adopting the Blue Ocean principle, healthcare organizations can innovate by developing differentiated and adaptable care models that cater to diverse populations, overcoming the limitations of conventional healthcare markets and opening new avenues for expansion.

In this regard, nursing has emerged as an innovative business model that not only broadens opportunities for professionals in the field but also fosters significant advancements in patient care. Over time, nurses have increasingly taken on proactive roles in creating and managing new ventures, particularly in health services, care products, and technological solutions. This highlights the rising trend of change in the healthcare sector, where innovation and entrepreneurship have become key elements in meeting emerging needs and improving service effectiveness (Borges et al., 2022).

Entrepreneurship in nursing is defined by the ability of professionals to recognize opportunities, mobilize resources, and apply managerial skills, taking calculated risks to launch new products, processes, and services in the healthcare sector. It is not only a critical skill for achieving independent practice but also an attribute that enhances nurses' capacity to serve individuals and communities effectively (Santos & Bolina, 2020).

The importance of entrepreneurship in nursing lies in its capacity to foster innovations that improve the quality of healthcare services and expand the profession's visibility. According to Coliche et al. (2019), entrepreneurship in healthcare offers nurses the opportunity for self-employment through innovative strategies. This enables nursing professionals to create innovative solutions to current problems, contributing to the advancement of the healthcare system.

Moreover, nursing entrepreneurship can manifest in various ways, such as through specialized consulting services, nursing clinics, education, and the development of products and technologies. Thus, nursing entrepreneurship provides opportunities for independent work, allowing professionals to pursue a personal vision and a passion for improving health outcomes through innovative methods. These actions not only meet patient needs but also strengthen nurses' position in the labor market (Silva et al., 2023).

The Federal Nursing Council (COFEN) has actively promoted innovation and entrepreneurship within nursing through various initiatives. These include launching the Inova-E portal, designed to provide information, resources, and support networks for entrepreneurial nurses, thereby encouraging the implementation of innovative solutions in healthcare. Additionally, COFEN has supported the creation of publications such as "Questions and Answers on Entrepreneurship and Innovation in Nursing", which offer practical guidelines on the topic to expand access to tools that foster innovation and business growth among nurses (COFEN, 2021).

## 8. FINAL CONSIDERATIONS

The objective of this theoretical study was achieved by analyzing the main sources of innovation in nursing, based on Schumpeter's theory (1934). The assessment of three primary sources of innovation – the introduction of new products, the application of innovative production techniques, and the

exploration of new markets – demonstrated their potential to revolutionize nursing practice. These elements can expand care options, and improve the effectiveness of medical services. The study revealed that innovation extends beyond the development of new products to include the establishment of new processes and business models that significantly impact the advancement of nursing and public health.

The introduction of new products, such as assistive technologies and innovative devices, has been recognized as a key source of innovation in nursing. The use of these emerging technologies, ranging from medical devices to digital telehealth platforms, enhances not only service efficiency but also the quality of care by enabling a more individualized approach to patient needs. This type of innovation aligns closely with Schumpeter's theory, which views the introduction of new products as a catalyst for economic and social transformations. In this context, product innovation enables more dynamic and efficient solutions to longstanding problems.

The adoption of innovative production techniques is another essential element of nursing innovation. This involves adapting new organizational processes, altering care protocols, and implementing innovative management models aimed at improving care delivery and enhancing the patient experience. Schumpeter (1934) underscores the importance of new organizational models in the innovation process, which is reflected in nursing practices, where organizational innovations can lead to increased efficiency and improved care. Process modifications not only enable faster and more accurate service but also help reduce costs and promote greater sustainability in the healthcare sector.

The exploration of new markets is also aligned with the pursuit of innovation in nursing, particularly during periods of crisis such as the COVID-19 pandemic. In this scenario, innovation transcends product and service adaptation to include expanding access to healthcare services for marginalized groups and geographically remote regions. Schumpeter's theory on market creation is evident in the development of remote care models and telemedicine, which have enabled healthcare delivery to previously underserved areas. Furthermore, new markets can be explored through new business models and services, such as specialized clinics or consultancies, which contribute to diversifying healthcare services.

Despite the comprehensive insights provided by this research on sources of innovation in nursing, certain limitations need to be highlighted. First, there is a lack of research specifically focused on the practical implementation of these innovations, particularly regarding the introduction of new business models in nursing. The absence of detailed studies on the obstacles faced by nurses – such as resistance to change, resource constraints, or lack of knowledge about patenting processes – hinders a full understanding of how these innovations can be effectively integrated. Additionally, the role of government policies and institutional support for technological innovation warrants further investigation.

Future studies should address these gaps by conducting a deeper analysis of the challenges professionals encounter when incorporating technological and business innovations into nursing practice. Moreover, it is relevant to examine the role of government policies and both public and private funding in promoting innovation in nursing. A more thorough evaluation of these issues can enhance our understanding of how innovations can be sustained and implemented in real-world settings, thereby supporting the advancement of nursing practice and strengthening the healthcare system overall.

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