

The evolution of the male role in nursing: a narrative review study

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ABSTRACT

Background: Although nursing is often viewed as a female-dominated profession, men have played important caregiving roles throughout history. Their contributions have been overlooked due to cultural norms, professional shifts, and gender stereotypes.

Objectives: To examine the global historical evolution of the role of men in nursing and highlight their contributions, challenges, and changing professional identity across different historical eras.

Methods: This narrative review was conducted using literature retrieved from PubMed, Scopus, Web of Science, ScienceDirect, and SciELO, supplemented by manual searches in Google Scholar and ResearchGate. Studies published in English or Spanish that addressed men's participation in nursing across various historical periods and regions were included. Article selection and data extraction were independently performed by two reviewers, with disagreements resolved by a third reviewer. Methodological quality was assessed using Joanna Briggs Institute tools.

Review: Twenty-seven studies were included and thematically analyzed according to five historical eras: Prehistory, Ancient Age, Middle Ages, Modern Age, and Contemporary Age. Evidence shows that men were actively involved in caregiving in early societies, religious institutions, military orders, and hospitals. Over time, sociocultural shifts, professionalization of nursing, and gender stereotyping led to the marginalization of men, particularly during the modern era. In recent decades, increasing recognition of gender equity has renewed attention to men's contributions, leadership roles, and educational experiences in nursing worldwide.

Conclusion: Men have contributed to nursing throughout history despite gender barriers; recognizing this legacy is vital to promote inclusivity, challenge stereotypes, and support gender-balanced education, policy development, and equitable professional practice globally today.

Keywords: Nurses (MeSH); Nurses, Male (MeSH); History of Nursing (MeSH); Gender Roles (MeSH); Review (MeSH).

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INTRODUCTION

ursing has existed for a long time, playing a crucial role in health care. Throughout history, there have been pioneering people, whose identities have yet to be discovered. The evolution of nursing has gone through numerous changes and challenges, adapting to the needs of each era and society. In this sense, men have gone through various circumstances throughout history, so today they have begun to play an increasingly notable role that enriches the profession with new perspectives

and skills. Over the years, their role in nursing has undergone an important evolution, reflecting paradigmatic changes throughout history.²

Florence Nightingale, historically recognized as one of the pioneers in the field of nursing, played a pivotal role in the history of nursing, which is widely known. Under her leadership, nursing was organized around ideals of caring and service, which were linked to the traditional social role of women. In its early stages of development, nursing was largely conferred by women, who set a clear precedent by restricting the

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participation of men.3

These events not only occurred during Nightingale's period in the 19th century but also persisted as a predominant pattern for many decades. The history of nursing demonstrates how gender norms have influenced the way people view and compose the workforce in this profession.⁴

From this perspective, based on Connell's theory of hegemonic masculinity, there is a dominant form of masculinity that subordinates both women and other forms of masculinity, shaping the gender scales that influence men's choice, participation, visibility, and recognition in certain occupations.⁵

However, it is crucial to recognize the gradual development of this trend. With progress towards gender equality in society, the participation of men in nursing has begun to increase, indicating a progressive change in the social norms and expectations that traditionally governed.⁴

Consequently, the role of men in nursing has undergone a fascinating journey of transformation throughout different historical periods. Therefore, it is proposed to narrate facts through the review of scientific studies. This is the first study to cover the role of men by historical periods, which is not documented. Understanding this historical evolution not only sheds light on the social constructs that have shaped male participation in nursing, but also provides a foundation for future research, educational curricula, and

policy development aimed at promoting gender equity in the profession. Despite the fact that men have a long history in nursing just like women, the objective of this narrative review is to examine the evolution of the role of men in nursing at a global level.

METHODS

The study was based on a narrative review. This focuses on summarizing and analyzing in detail the key findings of the reviewed articles. Although there is no standard format established for this type of review at present, there is a general consensus on the essential elements that a quality narrative review should contain. These elements include the identification and selection of studies, representation of the results, and synthesis of the most relevant findings.

Identification of studies: From August 2023 to March 2024, study identification was performed following the recommendations of Levac D. et al.,8 in order to locate studies on men's participation in nursing over different time periods. For this, searches were conducted regardless of the year of publication in electronic databases recognized in the academic field such as SciELO, Web of Science, Science Direct, Pubmed and Scopus. Additionally, a manual search strategy was implemented in Google and ResearchGate in order to identify possible complementary articles that may have been omitted in the gueries carried out in the five databases. In addition, the reference lists of selected articles were reviewed to identify additional studies that may not have been captured in the initial search. This citation tracking method helped to discover more related research that may have been overlooked.

To carry out this literature search, a combination of keywords based on DeCS/MeSH terminologies and custom keywords were used to match the search strategies of various databases. These keywords were selected after consultation with the co-authors and a senior librarian. In addition, Boolean operators such as AND or OR were used to combine the keywords effectively. The search strategy included terms such as History of Nursing, Male

Nurses, Nursing, Gender Role, Role of Men, and Gender Role. The Boolean structure used in the search strategy was as follows: (Nursing History) OR (Male Nurses) OR (Nursing) OR (Gender Role) OR (Male Role) AND (Gender Role).

Selection of studies: In April and May 2024, the selection of articles began. Exclusion criteria were established to rule out research that did not cover diverse periods and geographic locations, was not based on historical facts, omitted consideration of the male role, or was written in languages other than Spanish or English. As inclusion criteria, studies of different types and methodologies were included, to provide a comprehensive understanding of the topic. Microsoft Excel was used to screen articles that generally met the study criteria.

This software identified duplicate research, which was manually eliminated. The articles were then independently screened again. An initial selection was made based on titles and abstracts that were related to the research objective. Eligible studies were reviewed in full text and then reviewed again based on inclusion and exclusion criteria. This was in line with the recommendations of Levac D, et al., s who stated that study selection should be guided by eligibility criteria, the objective of the study and familiarity with the topic through reading the title, abstract and full article.

Two independent reviewers carried out the assessment of the incorporation of the articles, analysing the methodological quality of the incorporated systematic reviews and meta-analyses, as well as the data extraction. Any discrepancies in the selection between the reviewers were resolved by a third independent reviewer. Each selected research was then subjected to an assessment through the Joanna Briggs Institute (JBI) to determine its quality and relevance. It offers tools to review a wide variety of studies that helps to assess their relevance and applicability to the research topic. This ensured that the results of the study were based on solid and reliable data. The flowchart (Figure 1) summarises the identification and selection of the studies. According to

Moher D, et al., 10 it allows a clear order and structure for greater clarity and transparency.

RESULTS

Representation of the results: After reviewing and selecting the relevant studies, they were classified. These criteria cover aspects such as author's, year, country, objective, period analyzed, main findings, and database (Table I). This classification allowed a systematic and comparative evaluation of the studies, thus facilitating a coherent and structured synthesis of the collected material. In total, 27 articles were included, which were reviewed on multiple occasions to ensure the inclusion of all relevant information.

Summary of the most relevant discoveries: At this stage, Microsoft Excel was used to organize and code the extracted data into different themes. According to Levac D, et al., this step involves collating, summarizing, and narrating the findings. It also involves using sub-themes to organize the narrative.

Thematic analysis was essential to identify, analyze and narrate the role of men in nursing according to historical eras. The objective of the research directed the analysis, allowing a clear and structured categorization of the information. The inclusion of the information was developed from the detailed and systematic reading of the selected studies. The following key patterns were identified for the narrative of the evolution of the role of men in nursing: Prehistory, Ancient Age, Middle Age, Modern Age and Contemporary Age.

DISCUSSION

Initially, 1960 articles were found, then 27 articles were selected. To improve the clarity of the data selection process, a flow chart was used, as shown in Figure I. [Table I] shows the distribution of the selected articles, which details relevant information about each one. Regarding the narrative according to each historical era, it is presented as follows.

Prehistory: In the articles reviewed, it is worth mentioning Matesanz and

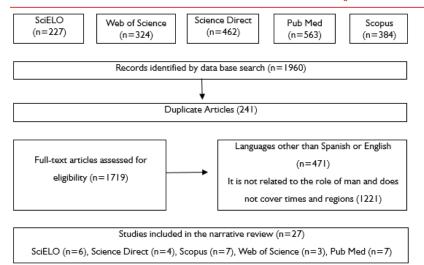


Figure 1: Flowchart Phase 1: Literature review in the SciELO, Web of Science, Science Direct, PubMed and Scopus databases to identify by historical ages to understand the evolution of the role of men in nursing.

Hernández et al., 12 who describe that since their creation, man was exposed to accidents and injuries that required care. This implies that they were involved in the care of these injuries. In this way, they developed and perfected different care techniques. It was with the beginning of the first tribes that rudimentary health practices emerged, essential for survival. Health care was part of the role assigned to men, particularly shamans or male members of the tribe who possessed special healing skills. These caregivers used deep knowledge of medicinal plants and natural and spiritual healing techniques, inherited through generations. 13,14

Ancient age: During this time, Losada J, et al.,15 pointed out that health care was marked by men with a strong influence of magical-religious beliefs, but there were also advances towards a more scientific and rational approach. In Greek culture, the contributions of Hippocrates stood out, who separated religious practices from superstitious ones. He promoted a rational approach, based on evidence and direct observation. According to Teodorescu S,16 Hippocrates can be considered a predecessor of nursing because he also provided principles that are fundamental to current nursing, such as the importance of the patient's environment and lifestyle. Regarding the role of gender, Foreman C, et al., ' points out that Hippocrates only trained men to carry out any treatment or therapy. Regarding men's work in care,

at that time, the practice was dominated by men. Care roles meant authority and respect within communities.¹⁵ Osses-Paredes C, et al.,¹⁸ point out that men were considered "pure" to practice nursing, an activity associated with magic, religion and military affairs.

In cultures such as the Greek and Roman, the roles of care and healing were usually performed by men. In this regard, Foreman C, et al., ¹⁷ points out that, in ancient civilizations, men were predominantly the caregivers of the sick. This pattern continued until the time of the empires, where men were trained to care for wounded soldiers.

Middle ages: At this stage, according to Smallheer B, et al., 19 nursing began to be organized more formally, mainly with the rise of the military-religious orders. Hernández F, et al., 12 point out that members of these orders enjoyed greater autonomy compared to their secular counterparts or even nuns, due to their access to education and positions of authority. They provided care for the sick and wounded in battle and, in some cases, management of epidemics and care for the poor and needy. They also engaged in charitable activities, founding hospitals, caring for pilgrims, and providing religious services and spiritual support. This spiritual dimension included confessions, and administration of sacraments, thus ensuring complete care that attended to both body and soul.20

Early religious orders with a military focus: Order of the Brothers of Saint Anthony, (11th century).21 The Knights Hospitaller (Order of Saint John of lerusalem. Later known as the Knights of Rhodes and, later, as the Knights of Malta) (11th century). The Knights Templar (Order of the Temple) (12th century). The Teutonic Knights (12th century). 17,18 The Knights of Saint Lazarus (12th century). 19 The Order of Santiago (12th century). The Order of Calatrava (12th century). 20,23 The Teutonic Order (12th century). 17,22 The Alexian Brothers of the Community (12th century).²⁴

Modern age: During this time, men's role in nursing was primarily in religious contexts only. With the development of the hospital orders, many men continued to perform caring roles.

Early religious orders without a military focus: The Alexian Brothers or Brothers of the Order of Saint Alexius, founded in 1334 in Germany. Order of Saint John of God (Hospitaller Brothers), founded by Saint John of God in 1540, this order began in Spain. The Order of Ministers to the Sick (Camillian Brothers), founded by Saint Camillus de Lellis in 1582 in Italy. 21,24-26

After a while, a prominent figure was Florence Nightingale, who promoted the professionalization of nursing as a female field, thus marking the beginning of stigmatization. Despite this, men continued to participate, mainly in support and administrative roles in hospitals. In addition, the teachings she imparted also included men in specific cases, focusing on practical skills rather than theoretical knowledge.

Nightingale observed that the men who helped care for the wounded during the Crimean War did not adequately perform their tasks due to lack of experience. On the other hand, she was forced to teach them since the proportion of women in the care field was lower than that of men. ²⁷ According to Foreman M, ¹⁷ Nightingale formed the modern perception that nursing is a female profession. She believed that only women should be nurses, except in cases where physical strength was needed, men could help, but not perform care.

According to Smallheer B, et al., 19 in

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Rodriguez	Quintero MC	Hernández F, et al., ¹²	Matesanz A "	Franco- Coffré JA ³⁴	Foreman M 17	Evans J 33	Dunwoody M ₃ı	Dailor E ²⁵	Cottingham M ³⁵	Conrad L 29	Bernalte V ²⁹	Bachrach D ²⁰	Attewell A 28	Attewell A 27	Author(s)
2012	2009	1997	2009	2020	1997	2004	2019	2021	8102	1999	2015	2004	2010	1998	Year
Spain	Colombia	Spain	Spain	Costa Rica	Australia	Canada	USA	USA	Netherlands	Germany	Spain	USA	Colombia	NSU	Country
Review the historical evolution of nursing care	Exploring nursing in the context of the Christian world	Analyze nursing from a professional perspective	Analyze the past, present and future of nursing	Social perception of the nursing profession	Analyzing whether men are taking control of the nursing profession	Historical and feminist perspective on men in nursing	Historical overview and research perspectives on nursing in the uniformed services	History of the development of medical missions and Catholic evangelization in sub-Saharan Africa	Exploring the representation and need for male nurses in professional texts	Describe the military orders and their role in caring for the sick	Reflect on the history, image and evolution of men in nursing in Spain	Examining the role of mendicant friars as military chaplains	Review of Florence Nightingale's life	Explore the life and contributions of Florence Nightingale	Aim
Prehistory to the Contemporary Age	Prehistory to the Contemporary Age	Prehistory to the Contemporary Age	Prehistory to the Contemporary Age	Contemporary Age	Ancient Age to Contemporary Age	Contemporary Age	Contemporary Age	Modern Age and Contemporary Age	Contemporary Age	Middle Ages	Contemporary Age	Middle Ages	Modern Age	Modern Age	Period
Traces the evolution of nursing care, highlighting significant milestones and changes in nursing practice and education.	Analyzes how the Christian religion has influenced the practice of nursing throughout history.	Discusses the evolution of nursing from its beginnings to its current state, emphasizing professionalization and changes in practice.	Examines the evolution of nursing and the future challenges of the profession, with a focus on constant adaptation and change	Explores how society perceives the nursing profession and the challenges associated with these perceptions.	Discusses the increasing participation of men in nursing and its possible implications for the profession.	Discusses the low representation of men in nursing from a historical and feminist perspective.	Provides an overview of the history of nursing in the uniformed services and highlights areas for future research.	Traces the evolution of medical missions and their influence on evangelization and health care in sub-Saharan Africa.	Examines how professional texts present the figure of the male nurse and discusses the need for greater inclusion and representation of men in nursing.	Investigates the contributions of military orders to healthcare and charity in the Middle Ages.	Analyzes the low representation of men in the nursing profession in Spain and its implications for gender equality.	It details how mendicant friars participated in military campaigns and provided spiritual and medical care to soldiers.	Examines Nightingale's impact on the professionalization of nursing and her lasting legacy in the field.	Highlights Nightingale's reforms in military and civilian health care, as well as her influence on modern nursing.	Main Findings

Table I: Results discussion matrix

			I he evo	lution of the ma	le role in nur	sing: a narrat	ive review stu	dy				
27	26	25	24	23	22	21	20	19	18	17	16	S.no
Mahon P, et al ²⁶	Teodorescu S 16	Wall B ²³	Smallheer B, et al.,	Petry L ³²	Osses-Paredes C, et al., ¹⁸	Mulkey DC 30	Meadus RJ, et al.,	Matthews S 37	Mackintosh C ²³	Losada J, et al., ¹⁵	Kearns T, et al., 21	Author(s)
2003	2018	2009	2020	1943	2010	2023	2011	2001	1997	2019	2021	Year
USA	Romania	USA	Republic of Ghana	USA	Chile	USA	United Kingdom	Australia	United Kingdom	Cuba	USA	Country
Analyze the evolution and current situation of men in the nursing profession.	Provide a brief history of nursing	Investigating religion and gender in a men's hospital and nursing school	Examining men's participation in nursing and leadership in GAPNA	Role of male nurses in field hospitals in Latin America	Men in the nursing profession	History of men in nursing: pioneers of the profession	Educational experience of male nursing students	Discussion on men registered in the nursing profession	Historical study on men in nursing	Historical evolution of clinical reasoning	Essay on how to achieve gender equality in nursing	Aim
Modern Age, Contemporary Age	Ancient Age to Contemporary Age	Middle Ages to the Contemporary Age	Prehistory to the Contemporary Age	Contemporary Age	Ancient Age to Contemporary Age	Contemporary Age	Contemporary Age	Contemporary Age	Middle Ages and Contemporary Age	Ancient Age to Contemporary Age	Middle Ages to the Contemporary Age	Period
Male nurses have faced historical and contemporary challenges, including gender stereotypes and discrimination, but have been instrumental in the development of nursing.	Nursing has evolved significantly since its beginnings, with notable professionalization in recent centuries. History shows an evolution from rudimentary care to modern evidence-based practice.	Religion and gender played critical roles in the formation and operation of men's hospitals and nursing schools, influencing the practices and acceptance of male nurses.	Men have played a significant role in nursing and leadership at GAPNA. They have faced challenges and stereotypes, but have made notable contributions to the field.	It analyses the participation of men in nursing in field hospitals and its impact on health care during conflicts and emergencies.	Examines the representation and perception of men in nursing, highlighting challenges and opportunities.	Traces the historical contribution of men to nursing and their pioneering roles in the development of the profession.	Investigates the experiences and challenges faced by men during their nursing education.	It addresses the challenges and experiences of men who have opted for a career in nursing, highlighting gender barriers.	Examines the history of men in nursing and the factors that have influenced their participation in the profession.	Analyzes how clinical reasoning has evolved throughout history and its impact on medical practice.	Discusses strategies and challenges to achieve gender equality in the nursing profession.	Main Findings

periods of armed conflict, gender restrictions in the nursing field showed greater flexibility, which favoured male presence. However, these circumstances were only considered exceptional situations rather than common structural transformations in the gender dynamics of this profession.

Later, the training was consolidated in the first school promoted by Nightingale, but only included women. During the 19th century, professional options for women were extremely limited. Nightingale saw nursing as an opportunity for women to have an economically viable profession, at a time when few professions were open to them. In addition, she saw nursing as a natural extension of domestic and caring roles. ^{27,28}

Contemporary age: Since the 19th century, men in nursing have faced significant barriers, largely influenced by gender stereotypes and legal restrictions. With the consolidation of Florence Nightingale's legacy, nursing began to professionalize and acquire a predominantly female character, which discouraged male participation due to social stigma. ^{25,29} However, during this time it was Walt Whitman, one of the pioneering men who worked as a nurse during the American Civil War. ^{19,30}

In the 20th century, during the context of the world wars, although men served in medical roles, they were excluded from nursing. This was due to the perception that women were more suited to caregiving, and also due to social norms. In England, after the Nurses Registration Act was passed in 1919, restrictions remained preventing men from registering as nurses, reinforcing a gender division in nursing work. ^{31,32}

However, after the war period in the face of a shortage of nurses, gender barriers were temporarily relaxed, allowing for greater male participation. Despite these temporary openings, strong stereotypes persisted that associated nursing with female care and undermined the social status of men in this profession. ^{33,34}

According to Mackintosh C, ²³ he points out that there were cases where men could practice nursing to cover specific needs only in nursing homes, military hospitals and in mental institutions, where they were seen more as

"guardians" than nurses.

There was then an attempt to recognise and formalise the role of men in nursing. The United States initiated recognition of men in the 1950s and continued to gain strength in the following decades. The founding of the American Assembly for Men in Nursing in 1971 symbolises a milestone in this change, providing a platform to advocate for the interests of men in the profession and encourage greater acceptance and visibility. 21,35

Similarly, in European countries such as the United Kingdom, Czechoslovakia, Denmark and Sweden, increased recognition of men in nursing was observed around the 1970s. This was partly a result of educational and legislative reforms that opened up more opportunities for men in the fields of health and education, which had previously been restricted. ^{21,35}

The first institutions in the world to include men: University of Iowa School of Nursing (United States), St. Vincent's Hospital School of Nursing (Australia), Bellevue School of Nursing (United States), and Royal College School of Nursing of Nursing (United Kingdom). Subsequently, other countries joined in the mid-twentieth century, broadening their focus beyond nursing education to encompass specialties and professional levels. Likewise, several laws and policies that limited the presence of men in nursing were abolished, promoting a broader and fairer inclusion. 26,32,36,37 In the 21st century, globally, men represent 11% of the nursing profession. In the Eastern Pacific, they are a considerable minority (5%), unlike in Africa (24%). In the Americas, they represent 13% of the total. Consequently, the percentage of men in the profession does not even represent a third of the number of nurses, given that nine out of ten nursing professionals are women. Given this situation, it has been suggested that male representation should be equitable. In this regard, although to a lesser extent, there are more men than women in only 13 countries around the world.30,38

Currently, there is a growing recognition of men within nursing, which is reflected in the gradual increase in the number of men entering this profession. This represents a cultural change towards greater gender

equality. Although still a minority, men are present in all nursing specialties and occupy positions at all organizational levels, including administrative, research, and educational roles.³⁹

Furthermore, there is a marked interest in areas such as entrepreneurial training and healthcare management, where many nurses are assuming leadership roles. 40

However, men still lack significant visibility in clinical practice in certain areas such as gynecology and obstetrics, pediatrics, and neonatology. This is unlike physicians, whose male presence in these areas is becoming more normalized. In contrast, men tend to be assigned or self-assign themselves to highly technically complex services, such as urgent care, emergency departments, or intensive care units, where their presence is more prominent.41 While there is no systematic preference among nurses for specific clinical areas, there is a widespread perception that certain fields are culturally "closed" to the male gender. Despite these challenges, many men in nursing benefit from certain social advantages related to their gender. These advantages allow them to avoid the barriers commonly faced by women in male-dominated professions. In contrast, men who practice traditionally feminized professions, such as nursing, more easily access leadership, management, and decisionmaking positions, even in contexts where they represent a minority. 42,43

With the advancement of technology, new spaces and challenges are also emerging. Artificial intelligence, digital platforms, and social media have reshaped both the image of the nursing professional and their role in society.4 An emerging trend is the presence of nurse influencers, who, through networks such as TikTok, Instagram, and YouTube, disseminate health knowledge, raise awareness of men's work in this discipline, and combat stigmas. These platforms allow young nurses to redefine their professional identity, connect with broader audiences, and promote a more inclusive, modern, and digitally adapted nursing practice. In this context, men feel freer to pursue their vocation without having to hide or justify their choice. While cultural and structural

barriers still exist, their impact appears to be diminishing in the face of an increasingly open, diverse, and technologically advanced society. 45,46 Compared to existing literature, this narrative review differs in its historical approach, as most previous studies have focused primarily on current barriers, perceptions, or quantitative trends related to men in nursing. For instance, quantitative studies have commonly addressed gender stereotypes, job satisfaction, and retention rates among male nurses. While such research provides valuable insights into presentday dynamics, this review complements those findings by offering a longitudinal perspective, examining how the role of men has evolved across distinct historical periods and cultural contexts.

CONCLUSION

The role of men in the history of nursing, although less evident than that of women, has existed since ancient times, responding to the specific needs of each era. Throughout history, the male contribution has progressed consistently despite facing various limitations. The male contribution is considered a crucial milestone in the development of nursing, as it has evolved at a social level with greater inclusion, being recognized and valued today. This study highlights the importance of recognizing and valuing the historical contributions of men in the field of nursing, promoting gender equality in this profession. Nursingrelated policies should support education and professional growth programs that not only encourage gender diversity, but also eliminate obstacles and biases that may discourage men from entering and progressing in this profession. These policies should include specific strategies to ensure an inclusive and equitable work environment that allows men to fully realize their potential.

The study's limitations included the lack of specific documentation for periods form Prehistory to Ancient Ages. In addition, the search was carried out by two male nurses which could lead to a potential bias with respect to the topic and data analysis. The potential bias was mitigated by the presence of female nurses in the team that helped with the writing of the manuscript.

REFERENCES

- Rodriguez Feijoo AB. History of Nursing. Historical evolution of nursing care [by Maria Luisa Martinez Martin and Elena Chamorro Rebollo]. Cult Cuid 2012;8(15):t0412.https://doi.org/1 0.14198/cuid.27228
- Velásquez Vergara SM, Arroyave Álvarez EO, Cacante Caballero JV. The role of men in nursing: a historical, narrative review [El rol de los hombres en enfermería: una revisión histórica-narrativa]. CES Enferm 2021;2(1):21-34. https://doi.org/10.21615/cesenferm.2.1.2
- Fernández-Delgado JCM, Canova-Barrios C. Male experiences in the nursing profession in the twentieth century [Experiencias masculinas en la profesión de enfermería en el siglo XX]. Rev Chi Enferm 2024;6:75034.https://doi.org/10.5354/2452-5839.2024.75034
- Mao A, Cheong PL, Van IK, Lon H. "I am called girl, but that doesn't matter" perspectives of male nurses regarding gender-related advantages and disadvantages in professional development. BMC Nurs2021;20(24).https://doi.org/10.1186/s12912-021-00539-w
- Polanco-Cerón N, Morrison R. Occupation as a gender reproducer: an approach to hegemonic masculinity [La ocupación como reproductora del género: una aproximación a la masculinidad hegemónica]. Cad Bras Ter Ocup 2024;32:e3644.https://doi.org/10.1590/2526-8910.ctoAO279936443
- Ferrari R. Writing narrative style literature reviews. Med Wri 2 0 1 5; 2 4 (4): 2 3 0 5. https://doi.org/10.1179/204748061 5Z.000000000329
- Green BN, Johnson CD, Adams A. Writing narrative literature reviews for peer-reviewed journals: secrets of the trade. J Chiropract Med 2 0 0 6; 5 (3): I 0 I-I7.https://doi.org/10.1016/S0899-3467(07)60142-6
- 8. Levac D, Colquhoun H, O'Brien KK. Scoping studies: advancing the

- methodology. Implement Sci 2010;5:69.https://doi.org/10.1186/1748-5908-5-69
- Moher D, Liberati A, Tetzlaff J, Altman DG; The PRISMA Group. Preferred reporting items for systematic reviews and meta-analyses: The PRISMA Statement. PLoS Med 2009;6(7):e1000097. https://doi.org/10.1371/journal.pm ed.1000097
- II. Matesanz A. Past, present and future of nursing: a constant aptitude [Pasado, presente y futuro de la Enfermería: una aptitud constante]. I Health Adm 2009;7(2):243-60.
- 12. Hernández F, Del Gallego R, Alcaraz S, González J. Nursing in history. an analysis from the professional perspective [La enfermería en la historia. Un análisis desde la perspectiva profesional]. Cult Cuid 1997;1(2):21-35. [Accessed on: October 16, 2024]. Available from URL:https://rua.ua.es/dspace/bitstream/10045/5239/1/CC 02 05.pdf
- Quintero MC. Nursing in the Christian world [Enfermería en el mundo cristiano]. Aquichan. 2009;1(1)42-5. [Accessed on: October 16, 2024]. Available from URL: https://aquichan.unisabana.ed u.co/index.php/aquichan/article/vie w/13
- 14. Torre M. Stopgappers? The occupational trajectories of men in female-dominated occupations. Work Occup 2018;45(3):283-312. https://doi.org/10.1177/0730888418780433
- 15. Losada J, Hernández E, Salvat M, Losada J. Historical evolution of clinical reasoning [Evolución histórica del razonamiento clínico]. MEDISAN. 2019;23(6):1164-80. [Accessed on: October 16, 2024]. A vailable from URL: http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S1029-30192019000601164&lng=en

- 16. Teodorescu S, Preda A. A brief history of nursing. SEA Pract Appl Sci. [Accessed on: October 16, 2024]. Available from URL: https://seaopenresearch.eu/Journals/articles/SPAS-18-18.pdf
- 17. Foreman M. Student corner: are men taking over the nursing profession? Contemp Nurse I 9 9 7; 6 (I): 2 6 9. https://doi.org/10.5172/conu.1997.6.1.26
- 18. Osses-Paredes C, Valenzuela Suazo S, Sanhueza Alvarado O. Men in the nursing professional [Hombres en la enfermería professional]. Glob Nurs 2010;18:1-7. [Accessed on: October 16, 2024]. Available from URL: http://scielo.isciii.es/scielo.php script=sci_arttext&pid=S1695-61412010000100016&Ing=es
- Smallheer B, Morgan B, Stern R. A historical look at men's involvement in nursing and leadership in GAPNA. Geriatr Nurs 2020;41:52-3. https://doi.org/10.1016/j.gerinurse.2020.01.003
- Bachrach D. The friars go to war: Mendicant Military Chaplains, 1216c. 1300. Cathol Hist Rev 2 0 0 4; 9 0: 6 1 7 - 3 3. https://doi.org/10.1353/CAT.2005.0003
- 21. Kearns T, Mahon P. How to achieve gender equality in nursing-an essay.

 B M J 2 0 2 1; 3 7 3: 1 2 3 2. https://doi.org/10.1136/bmj.n1232
- 22. Conrad L. The military orders: fighting for the faith and caring for the sick. Med Hist 1999;43:142-3. [Accessed on: October 16, 2024]. A vailable from URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1044133/
- Mackintosh C. A historical study of men in nursing. J Adv Nurs I 9 9 7; 2 6 (2): 2 3 2 - 6. https://doi.org/I0.1046/j.1365-2648.1997.1997026232.x
- 24. Wall B. Religion and gender in a men's hospital and school of nursing, I 8 6 6 9 6 9 . Nurs Res 2 0 0 9; 5 8 (I): I 5 8 6 5. https://doi.org/I0.1097/NNR.0b0I3e3181a308fe
- 25. Dailor E. A history of development

- of medical missions and catholic evangelization in Sub-Saharan Africa from the early twentieth century to the present: tracing some representative founders and orders in the context of the twentieth century Church. Linacre Q 2 0 2 1; 8 8: 3 8 I 9 0. https://doi.org/10.1177/00243639211024578
- 26. Mahon P, Cowman S. The male nurse, a historical and contemporary analysis of the literature. All IRE J Nurs Midwifery 2003;2(10):34-9. [Accessed on: October 16, 2024]. A v a i l a b l e f r o m URL:https://www.researchgate.net/publication/315787391 The male nurse a historical and contemporary analysis of the literature
- Attewell A. Florence Nightingale. UNESCO Quarterly Review of Comparative Education. 1998;28(1):173-89. [Accessed on: October 16, 2024]. Available from URL:https://unesdoc.unesco.org/ark:/48223/pf0000112468 eng
- 28. Attewell A. Florence Nightingale (1820-910). Temperamentvm. 2010;6(11):t0111. [Accessed on: October 16, 2024]. Available from URL: https://www.index-f.com/temperamentum/tn11/t0111.php
- 29. Bernalte V. Minority of men in the nursing profession: reflections on its history, image and evolution in Spain. Glob Nurs 2015;14(37):328-34. [Accessed on: October 16, 2024]. Available from URL: http://scielo.isciii.es/scielo.php?script=sci_arttext&pid=\$1695-61412015000100014&lng=es
- Mulkey DC. The history of men in nursing: pioneers of the profession. J Christ Nurs 2023;40(2):96-101. https://doi.org/10.1097/CNJ.00000 00000001040
- Dunwoody M. Overview and summary: nursing in the uniformed services: historical and research perspectives. Online J Issues Nurs 2 0 1 9; 2 4 (3): I I 0. https://doi.org/10.3912/OJIN.Vol24 No03ManOS
- 32. Petry L. US cadet nurse corps: established under the Bolton Act. Am J

- Nurs 1943;43(8):704-8. [Accessed on: October 16, 2024]. Available f r o m URL: https://uscadetnurse.org/sites/default/files/petry3456272.pdf
- Evans J. Men nurses: a historical and feminist perspective. J Adv Nurs 2 0 0 4; 4 7 (3): 3 2 I 8. https://doi.org/10.1111/j.1365-2648.2004.03096.x
- 34. Franco-Coffré JA. Social perception of the nursing profession. Curr Nurs Costa Rica 2020;38:272-81. http://dx.doi.org/10.15517/revenf.v0i38.36930
- 35. Cottingham M. The missing and needed male nurse: discursive hybridization in professional nursing texts. Gender Work Organ 2 0 1 8; 2 6: 1 9 7 2 1 3. https://doi.org/10.1111/gwao.1233 3
- 36. Meadus RJ, Twomey JC. Men student nurses: the nursing education experience. Nurs Forum 2 0 1 1; 4 6 (4): 2 6 9 7 9. https://doi.org/10.1111/j.1744-6198.2011.00239.x
- Matthews S. Registered male: a discussion on men in the nursing profession. Contemp Nurse 2 0 0 1; 1 1 (2 3): 2 3 1 5. https://doi.org/10.5172/conu.11.2-3.231
- 38. World Health Organization (WHO).
 State of the World's nursing 2020: investing in education, jobs and leadership. Geneva: WHO; 2020.
 [Accessed on: October 16, 2024].
 A v a i l a b l e f r o m U R L: https://iris.who.int/bitstream/handle/10665/331677/9789240003279-eng.pdf?sequence=1
- McDowell J. Masculinity and non-traditional occupations: men's talk in women's work. Gender Work Organ 2015;22(3):272-89. https://doi.org/10.1111/gwao.1207
- 40. Zavala IC, Figueroa MR, Olea CV. Gender stereotypes in male Nursing students [Los estereotipos de género en hombres estudiantes de Enfermería]. Conoc Enfer 2 0 2 2; 5 (1 6): 6 6 7. https://doi.org/10.60108/ce.177

- 41. Ruz F, Aravena C, Zegers MJ, Caballero I, Ruggieri I. Percepción de los profesionales de Enfermería respecto a los estereotipos y roles de género en los servicios de pediatría y urgencias, en centros de atención cerrada, durante el primer semestre del 2022 en la Región Metropolitana. Rev Confluencia 2 0 2 2; 5 (2): 3 0 4. https://doi.org/10.52611/confluencia.num2.2022.764
- 42. Fernández-Delgado JC, Núñez-Carrasco ER. Who was Marina Estrada Pérez? A story from nursing [Quién fue Marina Estrada Pérez? Un relato desde la Enfermería]. Benessere Rev Enferm 2022;7(1). https://doi.org/10.22370/bre.71.2022.3622
- 43. Velásquez S, Arroyave E, Correa S. The role of men in nursing and the emotions that underlie their professional practice [El rol de los hombres en enfermería y emociones que subyacen en su práctica profesional]. Index Enferm 2 0 2 5 ; 3 4 (| 1) : e | 5 5 9 3 . https://doi.org/10.58807/indexenferm20257359
- 44. Alegría-Bernal CM, Fernández-Delgado JC, Andía-Alegría FS. Generative artificial intelligence in clinical practice: undergraduate experience. Evol Stud Imaginative Cult 2024;8(53):532-42. https://doi.org/10.70082/esiculture.vi.1868
- 45. Restrepo-Sánchez A. Intersections of sex, gender, and sexuality in the

- caregiving practices of Colombian male nurses [Intersecciones de sexo, género y sexualidad en las prácticas de cuidado de enfermeros colombianos]. Rev Cienc Cuidad 2025;21(2):65-80. [Accessed on: October 16, 2024]. Available from URL:https://revistas.ufps.edu.co/in dex.php/cienciaycuidado/article/vie w/4651
- 46. Girão AL, Nunes ML. Lima IC, Aires SF, Paz SK, Lima RE. Innovation and use of information and communication technologies in nursing teaching: an integrative review [Tecnologías en la enseñanza en enfermería, innovación y uso de TICs: revisión integrativa]. Enferm Univ 2020; 17(4):475-89. https://doi.org/10.22201/eneo.23958421e.2020.4.763

AUTHORS' CONTRIBUTION

The Following authors have made substantial contributions to the manuscript as under:

JCMFD: Conception and study design, analysis and interpretation of data, drafting the manuscript, approval of the final version to be published

HFS: Conception and study design, drafting the manuscript, approval of the final version to be published

LSS: Analysis and interpretation of data, critical review, approval of the final version to be published

CCB & RMA: Acquisition of data, critical review, approval of the final version to be published

Authors agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

CONFLICT OF INTEREST

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DATA SHARING STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request



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