

Wound Navigator Profiling: scoping review

Competências do Gestor de Feridas: scoping review

Competencias del Gestor de Heridas: scoping review



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ABSTRACT

Objective: Map specific skills of the Wound Navigator.

Methods: A scoping review of complete and free articles in the databases CINAHL[®], Nursing & Allied Health Collection, Cochrane Plus Collection, MedLatina, MEDLINE[®] and 12 specialist associations in tissue viability, references in Portuguese, English, Spanish and French, with no time limit. Realized by two researchers in August 2017, of the 746 articles found, 19 met the inclusion and exclusion criteria.

Results: Four competency domains were identified: care (prevention/treatment of wounds and advanced therapies, decision-making; empowerment and clinical supervision), quality (specialized training; peer qualification; research and audit), and leadership (change agent; teamwork and consultant) and management (material selection/cost control).

Conclusions: With four areas of competences, the Wound Navigator in partnership focuses on redefining people's life plans in the presence of wounds.

Keywords: Wound and injuries. Nursing. Role. Review literature as topic.

RESUMO

Objetivo: Mapear as competências específicas do Gestor de Feridas.

Método: *Scoping review* de artigos completos e gratuitos nas bases de dados CINAHL[®], Nursing & Allied Health Collection, Cochrane Plus Collection, MedLatina, MEDLINE[®] e 12 associações especialistas em feridas, referências em Português, Inglês, Espanhol e Francês, sem limite temporal. Realizada por dois pesquisadores em agosto de 2017, dos 746 artigos encontrados 19 que atenderam aos critérios de inclusão e exclusão.

Resultados: Identificaram-se 4 domínios de competências: cuidado (prevenção/tratamento de pessoas com feridas e em terapias avançadas; tomada de decisão; capacitação e supervisão clínica), qualidade (formação especializada; formação de pares; investigação e auditoria), liderança (agente de mudança; trabalho em equipe e consultoria) e gestão (seleção do material; controle de custos).

Conclusões: Com quatro domínios de competências, o Gestor de Feridas se focaliza na redefinição dos projetos de vida das pessoas e suas famílias face à presença de feridas, numa parceria de cuidado.

Palavras-chave: Ferimentos e lesões. Enfermagem. Papel. Literatura de revisão como assunto.

RESUMEN

Objetivo: Hacer un mapeo de las competencias específicas del Gestor de Heridas.

Métodos: *Scoping review* de los artículos completos y libres en las bases de datos CINAHL[®], Nursing & Allied Health Collection, Colección Plus Cochrane, MedLatina, MEDLINE[®] y 12 asociaciones especializadas en la viabilidad del tejido; referencias en portugués, inglés, español y francés, sin límite temporal. Realizada por dos investigadores en agosto de 2017, de los 746 artículos encontrados, 19 atendieron a los criterios de inclusión y exclusión.

Resultados: Se identificaron 4 dominios de competencias: cuidado (prevención/tratamiento de heridas, terapias avanzadas, toma de decisiones; capacitación y supervisión clínica), calidad (formación especializada, formación de pares, investigación y auditoría), liderazgo (agente de cambio, trabajo en equipo y consultoría) y gestión (selección de material/control de costos).

Conclusiones: Con cuatro dominios de competencias, el Gestor de Heridas en asociación se centra en la redefinición de los proyectos de vida de las personas frente a la presencia de heridas.

Palabras clave: Herida. Enfermería. Rol. Literatura de revisión como asunto.

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■ INTRODUCTION

We are now faced with the inversion of the age pyramid, where the increase in the years of life leads to longevity-related emerging problems, for example, the wounds that appear⁽¹⁻⁵⁾.

People with wounds, where complications arise in their healing, face intense changes in life, such as, social isolation, pain, suffering, the need to adapt to daily treatment sessions, changes in physical activity and de-ambulation, restrictions the use of continuous medications and, especially, the self-image disorders^(4,6-7). The individual dependence on their wound's successive care is a change in their lifestyle, resulting in unexpected, unplanned change that needs to be adapted and considered a moment of transition for the individual and family life which leads to the emergence of physical, emotional and social limitations⁽⁷⁾. In a proposal to enable the people and their family to manage the processes of adaptation to their new living conditions, the nurse emerges in the literature with a profile of advanced practice skills in complex wounds.

The treatment of a complex wound can cost between €6650 and €10,000 per individual, with the total cost of wound care in European healthcare budgets ranging from 2 to 4%. It is probable that 27 to 50% of hospital beds for people with acute illness will be daily occupied with people with wounds⁽⁸⁾.

In recent years, there has been an increase in the demand for nurses with specific skills in approaching the individual affected by several factors: a) the inversion of the age pyramid that leads to an increase in the incidence of complex wounds; b) the exponential increase with costs for treating people with wounds; c) recognition of the population about the existence of these professionals; d) new technological advances and innovative treatments; e) rapid knowledge expansion; f) increased need for qualified professionals; g) greater complexity of the teams that require coordination in the area of wounds and tissue⁽⁹⁾.

In the early 1980s, in England, the role of the nurse caring for an individual with a wound is first described in the literature as «Tissue viability nurse»⁽¹⁰⁾. Other designations are found, such as: "specialist nurse in tissue viability", "wound care nurse", "tissue-viability nursing consultant", "main tissue-viability nurse" and "Wound Manager or *wound navigator (WN)*"⁽¹¹⁻¹²⁾. Regardless of the used terminologies, we opted for WN, since it enhances the attributes of all the definitions identified in the literature.

In order to operationalize a focused approach on and in the individual with a wound, being the core of the entire

process of decision making, it is necessary to have the intervention of an interdisciplinary team by a leader with specific skills in the area of wounds and defender of the interests and needs of the individual and family⁽¹¹⁾. The nurses with experience in caring for the wounded individual play a key role in the management of the wounded individual's transition, since that they are usually responsible for elaborating protocols for treatment and/or implementing the same ones and following the evolution of the wound in order to ensure better results for the people⁽¹³⁾.

Given the problematic in analysis and relevance of the phenomenon in human care, as well as the dispersed form as the information is found in the literature, this scoping review intends to answer the research question "*What are the specific skills of the wound navigator?*". The description of the professional competences is fundamental for the evaluation of learning, as an integrated process, where the nurse associates values and develops competences for the management of care to the individual with a wound⁽¹⁴⁻¹⁵⁾. The knowledge on the specific WN competences will facilitate the work of leaders and institutions in identifying nurses who take on this role as change agents and promoters for good practice⁽¹⁶⁾. It intends to get continuous improvement of the quality of nursing care, obtaining gains in health for the individual with wound and the development of policies of change in the context of health organizations. The objective of this study is to map the specific WN competences.

■ METHODS

Given the state of the art with regard to the research's question still underdeveloped in the investigation, we have used several sources even those with lower level of evidence, centralizing the method in a scoping review⁽¹⁷⁾.

The study followed the following steps: formulating the research question; specification of study selection methods; data extraction procedure; analysis and evaluation of the studies included in the scoping review; extraction of data and submission of the review/synthesis of the produced and published knowledge⁽¹⁷⁾.

The electronic search was done through the following databases: CINAHL®, Nursing & Allied Health Collection, Cochrane Plus Collection, MedicLatina, MEDLINE® and manual research in international wound healing and tissue associations (Wounds International, EWMA - European Wound Management Association, American Board of Wound Management, Wounds Canada, Tissue Viability Society, Tissue Viability Scotland, Wound UK, ELCOS - Sociedade Portuguesa de Feridas, APTF - Associação Portuguesa de Tratamento

de Feridas, GAIF - Grupo Associativo de Investigação em Feridas, Sociedad Iberolatinoamericana Úlceras y Heridas). The Boolean search strategy was used: TI (wound OR tissue viability OR ulcer) AND AB (nurs*) AND AB (care OR role OR skills OR patient care team OR navigator OR manager

OR multidisciplinary OR interdisciplinary OR tissue viability service OR interven* OR pratic*), in Portuguese, English, Spanish and French idioms, with no time limit, complete texts and free access.

The eligibility criteria described in Chart 1 were defined.

Selection criteria	Inclusion Criteria	Exclusion Criteria
P - Participants	Nurses and wounded individual and their family	Other health professionals (doctors, pharmacists)
C - Concept	Nurse competences that manages the care of the individuals with wound and their family.	Products used to prevent and treat wounds and wound healing Life quality of wounded individual and effectiveness of wound bed cover
C - Context	Healthcare	Pharmacology Pharmaceutical Industry
Study design	Level 1 to 5 ⁽¹⁸⁾	

Chart 1 - Eligibility criteria
Source: Authors

The study was carried out in one day (August 25, 2017) and 601 studies were obtained in the electronic research and 145 studies were obtained in the manual research. The selection of the sample was based on the inclusion and exclusion criteria. The exclusion criteria for the articles were related to the non-relevance to the research question and lack of information of the parameters considered important for analysis: participants; Interventions; results; and study design. The bibliographic references mentioned in the selected articles (2 articles) were also considered in the selected articles (2 articles). The titles and abstracts were read in a systematized form, followed by a complete reading of the selected publications, which can be accessed free of charge. At this particular stage of the review, the process was carried out by only one reviewer. However, the entire protocol phase, decision to include each article for scoping review and analysis of the underlying data were discussed by two researchers. After applying the eligibility criteria (chart 1) resulting from the sampling process, 19 articles were included for the study (figure 1).

Figure 1 represents the sample selection flowchart.

The main results were systematized in a chart format, showing the following data for data characterization and analysis: title, author, year, country, participants, study objective, results, study design and level of evidence⁽¹⁷⁾.

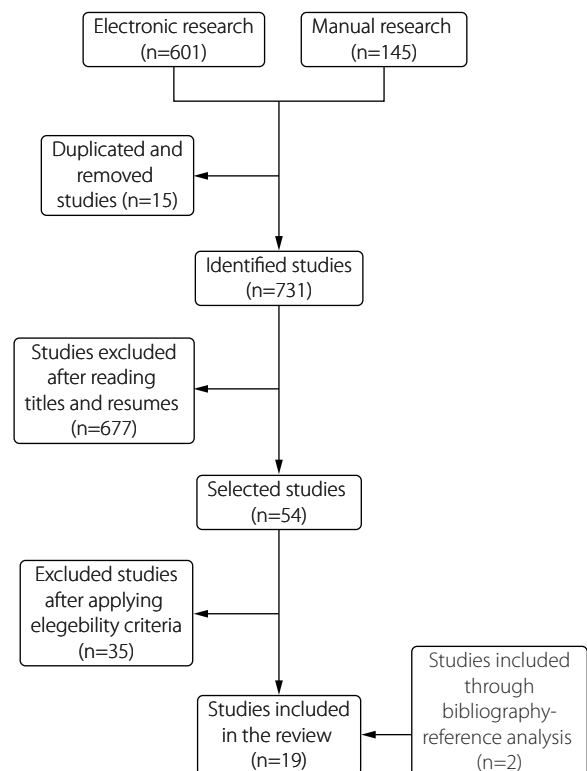


Figure 1 - Flowchart of the sampling process
Source: Authors

RESULTS

In the present scoping review of the 746 found articles, 19 articles met the inclusion and exclusion criteria, composing the sample that is represented in chart 2.

Title	Author(s) Year/ Country	Participants	Study objective	Results	Level of evidence and study design
<i>The role of the clinical specialist nurse in tissue viability</i>	Madeleine Flanagan, 1996, United Kingdom		Describe the role, context, complexity, challenges of the wound nurse and analyze the consequences for the lack of clear role and recognition	Post-graduate training in the area; Consulting; Investigation; Experience in caring for a wounded individual; Training peers, people, caregivers and population.	Level 5.c - Expert opinion
<i>The impact of change on the tissue viability nurse specialist: 1</i>	Madeleine Flanagan, 1998, United Kingdom		Analyze and describe the factors that influenced the development of the specialty in wounds and tissue	Post-graduate training in the area; Clinical decision-making capacity; Clinical supervision; Auditorship; Motivation and leadership of teams; Training peers, people, caregivers and population; Investigation; Experience in caring for a wounded individual; Consulting; Management; Change agent.	Level 5.c - Expert opinion
<i>Perceptions of tissue viability nurses of their current roles</i>	Charles Fox, 2001, United Kingdom	87 answered, to the 173 questionnaires given to wound nurses	Identify the perception of the current functions of wound nurses	Individualized care; Training peers, people, caregivers and population; Investigation; Auditorship; Knowledge acquired formally and informally in the wound area; Diversified experience in various contexts (hospital and community); Management; Change agent; Promoting personal development; Motivation and leadership of teams; Establishing close relationships with the others.	Level 4.d - Case Study

Title	Author(s) Year/ Country	Participants	Study objective	Results	Level of evidence and study design
<i>The Professional Role and Competence of Tissue Viability Nurses in Finland</i>	Salla Sepänen, 2002, Finland	84 answered, to the 123 questionnaires given to wound nurses	Identify the training, career path, roles and prerequisites for wound nurses	Decision-making in wound treatment; Selection and research on products used in wound treatment; Training peers, people, caregivers and population; Elaborating educational material for the clients; Investigation; Wound treatment consulting; Post-graduate training in the area; Identifying risk clients; Change agent; Management; People development; Registration of infections; Development of norms and protocols; Teamwork.	Level 4.d - Case Study
<i>Development of a tissue viability nursing competency framework</i>	Alison Finnie and Alice Wilson, 2003, United Kingdom	10 wound nurses	Define wounds nurse and their skills and roles.	Advanced training Investigation; Experience in caring for a wounded individual; Change agent; Training peers, people, caregivers and population; Consulting; Resolution of clinical problems; Teamwork; Reflective practice; Client training Motivation and leadership of teams; Involvement of the client in setting goals and care plan; Ethical decision-making.	Level 5.b - Expert consensus
<i>The Link nurse ideology and issues of competency</i>	Fania Pagnamenta 2005, United Kingdom		Describe the need to establish nurse service interlocutors to support wound nurses	Peer training; Establishment of interlocutors; Change agent.	Level 5.c - The expert opinion

Title	Author(s) Year/ Country	Participants	Study objective	Results	Level of evidence and study design
<i>Improving care through collaborative working in tissue viability</i>	Victoria Peach, 2006, United Kingdom		Describe the need for intra-team wound collaboration	Ability to establish effective communication with the others; Teamwork; Change agent; Elaboration of norms and protocols; Training peers, people, caregivers and population.	Level 5.c - The expert opinion
<i>How do nurses perceive the role of the TVNS?</i>	Louise Gibson, Marie McAloon, 2006, United Kingdom	7 Generalist nurses with 5 or more years of experience or nurses with experience in wound treatment	Describe nurse perceptions on the role of wound nurses and understand what leads them to seek the support of wound nurses	Experience in caring for a wounded individual; Training peers, people, caregivers and population; Consulting; Investigation; Change agent; Post-graduate training in the area; Leadership; Resolution of clinical problems; Teamwork; Reflective practice; Training.	Level 4.d - Case Study
<i>Where is tissue viability in 2007?</i>	Maureen Benbow, 2007, United Kingdom		Reflect on the pathways covered by the wound specialty and the implications for the quality of client care.	Experience in caring for a wounded individual; Post-graduate training in the area; Motivation; Training peers, people, caregivers and population; Consulting.	Level 5.c - The expert opinion
<i>Chronic wound audit: evaluation of a tissue viability service</i>	Christine Tait and Elaine Gibson, 2007, United Kingdom	56 clients with wounds	Measure the number of clients with chronic wounds	Auditorship; Prescription of appropriate treatment; Training peers, people, caregivers and population.	Level 4.b - Cross-sectional study

Title	Author(s) Year/ Country	Participants	Study objective	Results	Level of evidence and study design
<i>Wound care teams: redesigning community nursing services</i>	Marcia Haworth, 2009, United Kingdom		Describe a model for approaching the wounded individual in the community, by using an electronic platform for monitoring the results	Multidisciplinary teamwork; Training peers, people, caregivers and population; Experience in caring for a wounded individual; Treatments with advanced therapies; Auditorship; Investigation.	Level 5.c - The expert opinion
<i>Tissue viability 2010 -2015: from good to great</i>	Jeanette Milne and Karen Ousey, 2010, United Kingdom		Analyze the impact and challenges of specialty wound healing in the community	Post-graduate training in the area; Experience in caring for a wounded individual; Training peers, people, caregivers and population; Management; Elaborating action protocols for the care of the individual with wound; Effective communication; Prevention and health education for people with wounds.	Level 5.c - Expert opinion
<i>The role of the wound care nurse: an integrative review</i>	Matthew Dutton, Mary Chiarella and Kate Curtis, 2014, Australia		Determine the current state of knowledge on the practice context, the necessary requirements and the impact of the wound nurse role	Post-graduate training in the area; Experience in caring for a wounded individual; Responsibility and treatment of the client with wound; Motivation and leadership of professional teams; Teamwork; Resolution of problems; Reflective practice; Empowering; Management; Change agent; Training peers, people, caregivers and population; Consulting; Research and publication; Involvement of the client in setting goals and care plan;	Level 4.a - Systematic review on the literature of descriptive studies

Title	Author(s) Year/ Country	Participants	Study objective	Results	Level of evidence and study design
<i>The role of the tissue viability nurse</i>	Fania Pagnamenta 2014, United Kingdom		Describe the role of the wound nurse	Post-graduate training in the area; Well-developed communicational skills; Experience in caring for a wounded individual; Training peers, people, caregivers and population; Investigation; Auditorship; Management; Autonomous work; Teamwork; Elaborating procedural norms, reflecting the current guidelines on best practices; Consulting.	Level 5.c - Expert opinion
<i>Managing Wounds as a Team</i>	Zena Moore (IRE), Gillian Butcher (AUS), Lisa Q. Corbett (USA), William McGuinness (AUS), Robert J. Snyder (USA), Kristien van Acker (BE), 2014		Provide recommendations for implementing a team approach to wound management in all clinical settings and thus develop a model of advocacy for policy makers at the governmental level.	Involvement of the client in setting goals and care plan; Post-graduate training in the area; Knowledge on the role of other health professionals, referral mechanisms and remuneration; Empowering the clients; Teamwork; Change agent.	Level 4.a - Systematic review on the literature of descriptive studies and 5b. – Expert consensus
<i>The changing role of the tissue viability nurse: an exploration of this multifaceted post</i>	Karen Ousey, Leanne Atkin, Jeanette Milne, Val Henderson, 2014, United Kingdom		Analyze the role of the Wound Nurse in the United Kingdom and discuss the diversity of key roles, attributes and skills needed	Motivation and leadership of teams; Client risk and safety management; Experience in caring for a wounded individual; Consulting; Change agent; Specific postgraduate qualification in the area and participation in conferences; Training peers, people, caregivers and population; Management; Investigation; Elaborating action protocols to guarantee the national and international guidelines in the area of wounds on the best practices; Auditorship; Involvement of the client in setting goals and care plan; Ethical decision-making.	Level 5.c - Expert opinion

Title	Author(s) Year/ Country	Participants	Study objective	Results	Level of evidence and study design
<i>Exploring the role of the Tissue Viability Nurse</i>	Karen Ousey, Jeanette Milne, Leanne Atkin, Val Henderson, Nigel King and John Stephenson, 2015, United Kingdom	261 questionnaires and 7 semi-structured interviews with nurses or health professionals caring for people with wounds	Analyze the role and identify the primary responsibilities of the Wound Nurse in the United Kingdom.	Post-graduate training in the area; Experience in caring for a wounded individual; Change agent; Management of human resources, materials, equipment and values; Communication skill Clinical credibility; Knowledge of the organization; Resolution of problems; Project management; Time management; Motivation and leadership of teams; Auditorship; Training peers, people, caregivers and population; Teamwork; Referral to other specialties; Elaborating procedural norms; Contribution for elaborating norms for General Health Direction.	Level 3.e - Observational study without control group
<i>A community of practice as a model of nurse-led wound prevention and management</i>	Susan Monaro, Megan White and Sandra West, 2015, Australia		Describe a model of preventing and treating wounds in the community	Experience in caring for a wounded individual; Multidisciplinary teamwork; Consulting; Treatments with advanced therapies; Auditorship; Training peers, people, caregivers and population; Elaborating norms and procedures based on the best scientific evidence; Management.	Level 5.c - The expert opinion
<i>Tissue Viability Leading Change competency framework: preliminary analysis of use</i>	Karen Ousey, John Stephenson and Becki Carter, 2016, United Kingdom	34 health professionals	Analyze use of a competence model of the wounds nurse	Generic (knowledge, attitudes, psycho-social and psycho-motor elements, problem resolution and critical thinking); Experience in caring for a wounded individual; Post-graduate training in the area; Training peers, people, caregivers and population; Client risk and safety management; Investigation; Auditorship; Motivation and leadership of teams; Management; Teamwork.	Level 4.b - Cross-sectional study

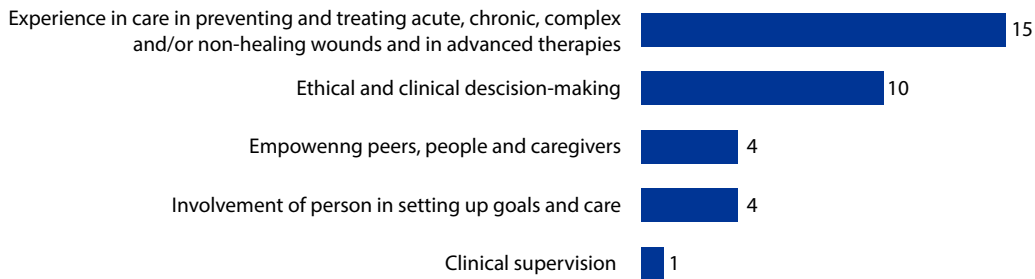
Chart 2 - Sample results

Source: Research data.

Caption: level 1 - experimental studies, level 2 - almost experimental studies, level 3 - observational analytical studies, level 4 - observational descriptive studies and level 5 - expert opinion and laboratory research(18)

Resulting from analyzing the data, the results were organized in four areas of WN competences: a) care; b) quality; c) leadership; d) management. The leadership, quality and care domains had already been referenced in the literature⁽¹⁹⁾, however from the analysis that we carried out in other studies, the pertinence of including the management's domain emerged. From the graphical representation, the main results of the data analysis are systematized in a descriptive manner.

In the care domain, the most referred competences, in about 80% (n=15) of the studies are «experience in care in preventing and treating acute, chronic, complex and/or non-healing wounds and in advanced therapies», followed by «clinical and ethical decision-making» (n = 10), the least named were «empowering the peers, people, and caregivers» (n = 4), «the individual's involvement in goal setting and care» = 4) and finally «clinical supervision» (n = 1).

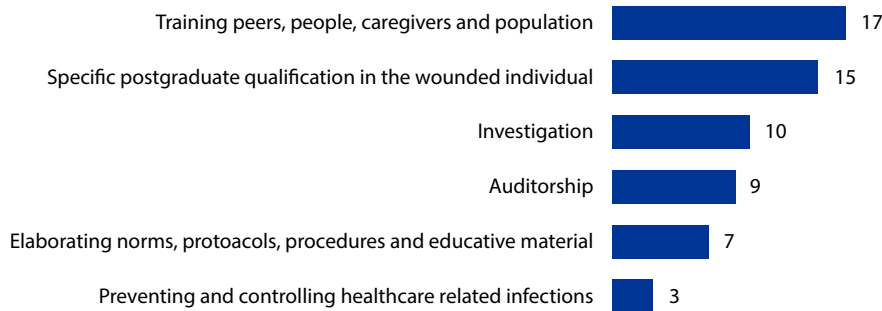


Graph 1 - WN competences: domain of the care

Source: Research data

In the quality domain, «training peers, people, caregivers and population» is emphasized with major frequency, followed by «specific postgraduate qualification in the individual with wound area» (n=15) and the «investigation»

(n=10), but with less frequency we obtained «audit» (n=9), «elaboration of norms, protocols, procedures and educational material» (n=7) and «preventing and controlling healthcare-related infections» (n=3).

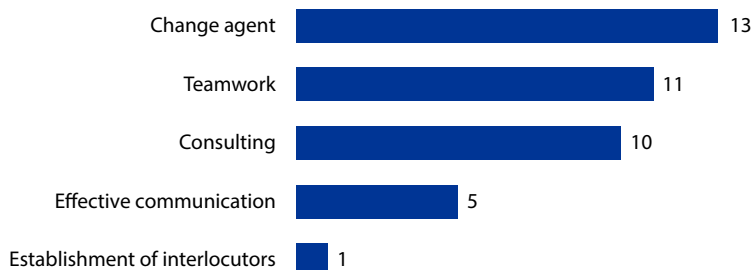


Graph 2 - Competences of WN: domain of quality

Source: Research data

In the leadership domain, the most mentioned WN competences, in about 70% (n=13) of the studies, are «change agent» and «teamwork» (n=11), followed by

«consulting» (n=10), «effective communication» (n=5) and «establishment of interlocutors» (n=1).

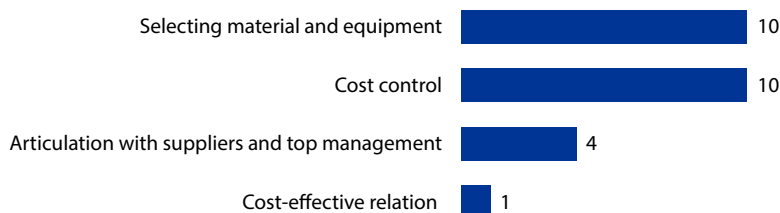


Graph 3 - Competences of WN: Domain of leadership

Source: Research data

In the domain of management, the most frequent competences in about half of the studies are «cost control» (n=10) and «selecting material and equipment» (n=10),

followed by «articulation with suppliers and top management» (n=4) and «cost-effectiveness relation» (n=1).



Graph 4 - Competences of WN: domain of management

Source: Research data

■ DISCUSSION

The study sample has low evidence since it is between levels 3 and 5⁽¹⁸⁾. The fact that the level of evidence is low may raise the interest of researchers in the development of new researches, given the actuality and relevance of the phenomenon in the human care scope.

The sample, according to the years of publication, is located between 1996 and 2016. The authors' affiliation is composed of the United Kingdom, Australia and Finland. There is a publication that brings together international authors (Ireland, Australia, United States of America, and Belgium).

The included studies^(9,12,16,20-30) are in the majority (78.9%) from the United Kingdom (UK), being that 2014 was the year where there was more publications on the subject (21.1%). The UK has been dedicated to the subject, once that the specialty in wounds and tissue for the nursing professionals is recognized, where the nurse is able to perform such functions⁽¹⁶⁾.

Care

The domain of care encompasses all aspects that relate to clinical and ethical decision-making in the wound-related area. It integrates the holistic approach to meeting the needs of people with wounds, peer, individual and caregiver training and the clinical supervision^(1,9,11-12,16,19-22,25-26,28-29,31). The WN assumes as a defender of the individual's interests and in formulating the plan of care it combines the sensed needs, the goals of treatment, the appropriate care centered on the individual⁽²⁰⁾ and the preparation of discharge to home⁽³⁰⁾.

The WN has the capacity to prescribe the best care for and with the individual, but it also acts in its field of action, in order to develop its preventive, diagnostic and

therapeutic decision-making in people with acute, chronic, complex and/or difficult to heal wounds and in advanced therapies. Examples of dermatological conditions to which the WN can develop areas of practice are surgical, traumatic injuries, pressure lesions (PL), leg ulcers (LU), diabetic foot syndrome, stomatherapy, malignant wound, incontinence-associated dermatitis (ICD), cutaneous breakages, among others and in compressive therapy and advanced therapies such as topical negative pressure therapy, larval therapy, ultrasound, electrotherapy, topical oxygen therapy, hyperbaric chamber, genetically modified factors, among others. The most frequently reported complex wounds in the articles as targets for WN care were PL and LU^(1,9,11-12,16,19-22,25-26,28-29,31). The WN's areas of expertise are developed in the hospital, community and private clinics^(1,22).

The WN is not limited to clinical decision-making but should also discuss ethical issues in a logical and reasonable manner, apply ethical principles in practice, and analyze the ethical dilemmas being faced^(19,25). WN's autonomy limit has not been defined, however, it has been pointed out that it is relevant to provide clear guidelines regarding professional boundaries, which often follow national/local recommendations or legislation. Like any nurse, WN acts autonomously^(19,32).

The capacitation of people, often referred to as *empowerment*, creates opportunities for people to regain their physical, psychological and social independence^(1,19,27). This empowerment should also be targeted to caregivers and peers.

The WN can not act alone, it should involve the individual/family in setting goals and care^(1,11-12,20). Evidence-based therapeutic interventions planned for the individual, while incorporated, pass sometimes to the background because they do not take into account the individual's perception or goals, requiring the nurse to take a creative approach

and efforts to understand the reasons for the treatment and benefits⁽¹¹⁾.

The clinical supervision has been referred to as the competence that the WN must develop to monitor and provide the improved care for its peers. For the supervision to be seen as favorable it is necessary that the interactions develop in an environment of confidence and of affective and cognitively stimulating inter-relief^(21,33).

Quality

The quality domain involves risk management and maintenance of a psychosocial environment that promotes safety, protection and optimal levels of health, as well as activities in which the WN is a trainer and a training element, promoting the self-development^(1,9,11-12,16,19-22,25-26,28-31).

The most frequent competence is the training, in which the WP assumes the role of a trainer to the wounded people, caregivers, population and peers, in a formal or integrated environment, which implies in a dynamic and interactive process. It is important to share and disseminate knowledge and the WN must have this capacity, developing personal and professional growth, as well as the people it trains. It will be necessary to assess training needs, develop a training plan and establish measurable results for nursing practice^(1,9,11-12,16,19-22,25-31).

The need for specific training in the area of people with wounds is unanimous, not only having to "do" but also to "know how to act". Training during the nursing undergraduate course is insufficient in this area, so it becomes necessary for nurses in their continuing education to promote personal and professional development, attending postgraduate courses, specialization or master's degree in the area of people with wounds^(1,11,16,20-22,25-26,29-31,34). There are authors who add that at least one master's degree must be required as a way for developing the skills of analysis and critical evaluation of relevant research and implementation of the relevant research data⁽¹²⁾. It is also appropriate for them to participate in conferences where the WN is involved in the specialized audience process, as well as to update and transfer their knowledge to their professional field⁽¹²⁾.

The curricular plan for WN nurses, normalizing their qualifications in knowledge, know-how and know how to be, was submitted in 2017⁽³²⁾. The programmatic contents focus on: role of nurses in prevention; evidence-based practice health education and self-care promotion; Transitional Care Model (individual-centered care); types of wounds and healing process; nutrition and wound healing; microbiology; antimicrobial agents and wound cleaning; types

of debridement; healing in a humid environment; options for advanced or non-conventional therapies; PL; diabetic foot syndrome; ulcers of the lower limbs; legal, ethical and economic care-related aspects; and nursing records⁽³²⁾.

The audit is another competence mentioned in the literature, where the WN is in constant articulation with the quality department. Within this competence there are several activities that the WN must carry out, such as elaborating audit tools and evaluating their reliability and validity. The WN should perform audits on the functioning of the support surfaces (mattresses and pillows), surgical site and wound infection, people's satisfaction, interventions implemented to reduce PL, among others. In order to develop this competence, it should conduct non-conformities management, root cause analysis of incidents and implement agreed national and international targets^(1,19).

In the research competence, it should produce studies on the incidence and prevalence of wounds, satisfaction and quality of life of the wounded individual, implemented interventions and impact on the role of WN within the team. On the other hand, it must know how to interpret the results and apply the knowledge produced by the evidence^(1,12). In this capacity, the WN must implement data collection methods, teaching about them and involving other elements of the team in this activity, as well as identifying problematic areas and non-adherence, in order to develop this activity area. There is little evidence on the impact of specialized nurses on people with wounds in the community and in the hospital⁽¹⁾. It is pertinent to develop studies demonstrating that WN interventions are essential for people and institutions, as well as their context, practical scope and impact⁽¹⁾. It is possible to provide data in the form of results in order to demonstrate that WN interventions bring out benefits to the individual/family and institution based on indicators, such as, amputation rates, incidence and prevalence of PL, healing rate or positive modification in wound healing, pain control, people's satisfaction (reported by the individual), team effectiveness and quality of life assessment^(11,20).

The WN should demonstrate knowledge of the standards and initiatives launched in Governmental Health Organizations and National and International Wound Associations^(1,19), as well as contributing to the elaboration of national and international standards, protocols, procedures and educational material in the area of wounds and tissue in their professional field⁽¹²⁾.

It has been reported that WN can improve outcomes for the individual through infection prevention and early identification⁽¹²⁾. In one study, a global prevalence of acquired infection of 8.1% was identified, being the infection of the

skin and tissues the most frequent ones, corresponding to more than a third part of the identified infections⁽³⁵⁾. As these numbers are considerable, WN should intervene in this area, by monitoring, for example, surgical site infection rates, lower limb cellulite admissions, and chronic wound infection⁽¹²⁾, thus developing the competence «prevention and control of healthcare associated infections».

Leadership

By adopting the leader role, the WN should act as a consultant, implement and disseminate the necessary changes, leading the team accordingly^(1,19).

The WN is required to know how to communicate with the various elements so that the message is perceived and it is essential to motivate the other. A tripartite communication between the WN, the individual and the local health professional should sometimes be settled, facilitating interdisciplinary practice^(11,20,22,24).

Being a change agent, has been a recognized competence of the WN, whereas it must be able to change the behavior of people, peers and institutions, with evidence-based argumentation^(1,12,16,19,21-26,28,30). Teamwork must be developed in every way, in the partnership of care with the individual and family, intra and interdisciplinary. Set up a homogeneous group to define work strategies, goals and collective goals to achieve, as well as democratic leadership centered on a motivating leader. WP is expected to work collaboratively in order to promote and support wound innovations, reduce variation in care in different areas, to ensure effective use of resources, to enable members to be supported by the peers, enabling personal development and advocate for evidence-based practices. It is effective to develop common guidelines in approaching the individual with a wound, to establish an effective and secure communication system between the community and the hospital, in order to provide shared education and due referral^(1,11,16,19,23-25,28-29,31,34).

The essence of the team approach lies in the interdisciplinary of the team, sharing of responsibilities and accountability for achieving the desired results, focusing on the specific knowledge contribution and experience of each element. The teams can be made up by nurses, doctors of various specialties, podiatrist, nutritionist, social worker, psychologist, physiotherapist, individual, family, research team and managers. All elements of the team are equally important, including the individual. Studies have shown that the care provided by a team with different disciplines results in favorable healing rates when compared to the care of a team with a single discipline^(10,11).

The WP should be able to recognize its limits and make the referral to the most qualified health professional in order to respond to the individual's problem. Routing mechanisms become essential, because the individuals, throughout the healing process of their wound, need continued care ranging from acute to chronic care with physical and psychosocial needs, necessitating an interdisciplinary approach^(10-11,19,23). Recognizing the WP role in the team becomes pertinent, in such a way to facilitate the processes of urgent analysis, case discussion and efficient transference of people's registers⁽¹¹⁾.

The consulting expertise should be developed to support peer decision-making in the best practices, which can be conducted face-to-face, by telephone or by e-mail, so that the WP is expected to have direct contact to play this role^(1,12,19,21,25-26,29,31,34).

A strategy to maintain continued care will be to establish interlocutors in the services, due to the scarcity and various functions assumed by the WP⁽²⁹⁾. The role of the interlocutor is relevant in the areas of training and reference source in order to facilitate communication as well as ensuring that best practices are applied. This role should be assigned to the nurse that is enthusiastic, motivated and voluntary and that assists a professional training in the area of people with wounds⁽²³⁾.

Management

The management domain refers to the importance of care meeting the needs of people but that also manages resources effectively, a capacity being increasingly required by health systems, requiring increased competence in the management area^(1,12,16,20-22,29,31,34).

There are a plethora of products available for wound treatment and the WN should ensure that the chosen products are cost-effective appropriate. The knowledge of various equipment and products available on the market is necessary to provide effective care. One of the advantages of building up protocols for the products to be used at each wound healing stage is not only to guide the decision-making of peers, but to reduce costs with inappropriate options^(1,12,20,29,34).

Treatment costs are higher among professionals who do not attend specific training and costs tend to decrease as the number of training hours increases⁽³⁶⁾. Thus, the WP that has advanced knowledge in the tissue area has a more consistent decision-making and manages to reduce the costs associated with poor clinical errors, bad practices and performance⁽³⁶⁾. The WN should also ensure that the products available are used effectively and in accordance with its indications⁽¹²⁾.

The WN should be involved in the choice of wound bed cover materials and equipment used for prevention and treatment (support surfaces, beds, among others). Articulate with top management on the provision of services and suppliers to ensure the best value and assure equipment's availability. The WN should also account the costs related to training and qualifying the team⁽¹²⁾.

One of the challenging activities to be performed by the WN is selecting the products to be listed on the institution forms, since that the available evidence is not based on clinical trials but rather on case studies⁽²⁹⁾. Evidence-based practice should support this option, but in

reality, the majority is based on intuition, clinical experience, and specific conditions.⁽²⁹⁾

When the WN chooses the wound bed cover materials, it can not just think on the unit cost for each treatment, it is necessary to reflect the total cost in the long run. The WN has to make the calculation in relation to the benefits for the individual (more comfort, life quality and accelerated healing), hours of the nurse's care, times necessary to change the covering materials of the wound bed and shorter hospitalization time⁽³⁷⁾.

Given the aforementioned, the main results of the present scoping review are summarized in figure 2:

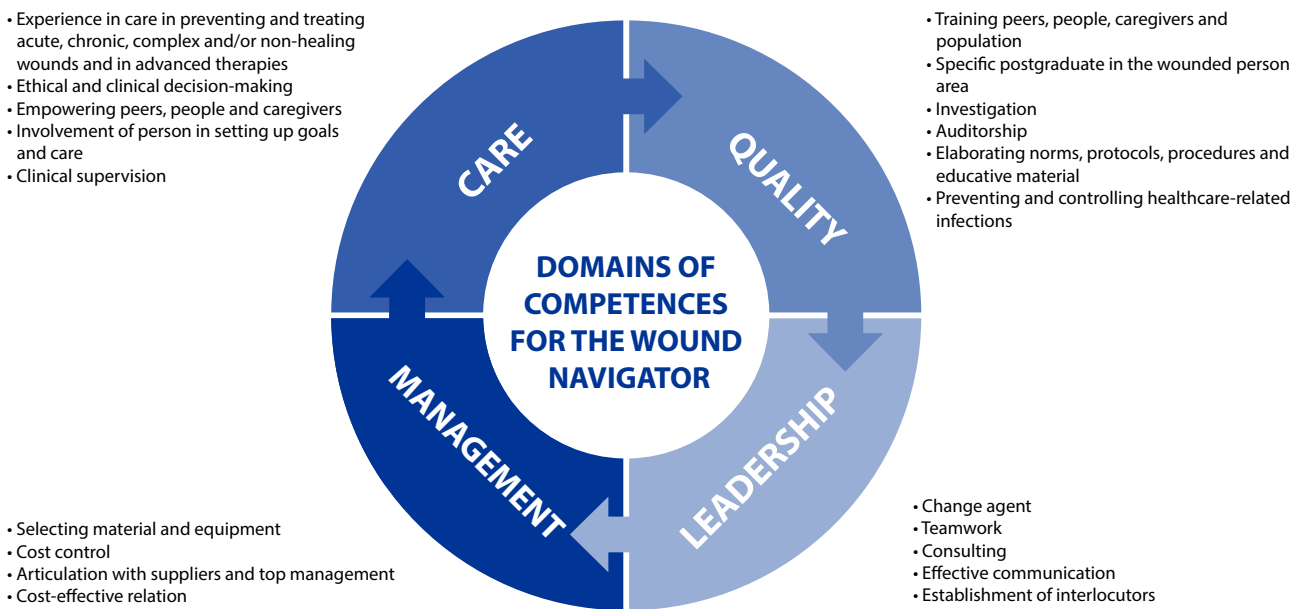


Figure 2 - Schematic representation of WN competences
Source: Research data

CONCLUSIONS

With this scoping review we verified that despite the existence of professionals in the care-related practice with some WN competences, their recognition in the literature is still limited, requiring additional research. Some evidence associates it with the specialist nurse in wounds and tissue. The WN should be the most capable health professional to accomplish this role. We used the term WN because we consider it to be innovative, dynamic and more comprehensive, emphasizing the partnership of care, empowerment of people and caregivers, where the individual is the center of the entire decision-making process.

Since the beginning, nursing has been concerned with the care of the individual with wounds and over the years there has been a growing interest in this area and a

scientific investment. The nurses are those who make major contact with the people, a fact that makes them privileged with regard to the opportunity for quality care and daily monitoring the obtained results.

The profession with the greatest emphasis on people-centered care models and their transition processes in the healthcare scope is the nursing, with competences that are indispensable to the WN. The current philosophies in people with complex wound care seem to suggest a great change of responsibility from the doctor to the nurse. In view of the above, the nurse seems to be the most qualified professional to assume this function.

This scoping review has been shown to fill the gap in the systematization of current knowledge about GM competences. According to our study objective, four WN domain competences emerged: care, quality, leadership and

management. WN is a necessary element for reducing risks and costs, improving healing rates, bringing out effective results for people and providing specialized care, contributing to the well-being of the injured individual.

The WN can be seen as the defender of people's interests where the WN assumes being their partner and lawyer by supporting them. The WN goes beyond the sphere of exclusive wound care, since that a wound is not only a localized lesion on the skin, but one that impacts on people's life quality, which involves decreased mobility, pain, suffering, social isolation through odor and exudate, depression, low self-esteem and costs.

We understand that a further increase in databases, as well as the inclusion of all articles in the selection process, even those whose access is paid, could have consolidated or added other relevant results. The process of reading titles/abstracts and full texts by two reviewers could have limited the bias in the selection of studies or even consolidate the study sample, resulting from the discussion of two reviewers.

Looking for interpreting each competence, able to perceive the integration with the others in a single meaning, we present a possible WN definition, as a specific contribution to the care-related practice: WN is a proactive health professional with specific knowledge in the tissue area who mobilizes skills and resources available to optimize the individual with the wound and his family, enabling them to manage their life and health-disease situation, in a meaning of care partnership and interdisciplinarity.

This study may bring out contributions to people with wounds, by identifying the WN's domains of activity and competences the institutions can adopt and formalize teams composed by these professionals, as change agents and good practice promoters, with a view to continuously improving nursing care quality, obtaining health gains for the individual with the wound and value for health-care. It is necessary that the care be centralized in interdisciplinary teams, constituted by WN and other important professionals in satisfying the needs of people with tegumentary alterations.

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