

## Nursing care for people with wounds in primary health care: Challenges and strengths

Helena Sophia Strauss Mohr<sup>1,\*</sup> , Cilene Fernandes Soares<sup>2</sup> , Denise da Silva Loss<sup>2</sup> ,  
Guilherme Mortari Belaver<sup>2</sup> , Fernanda Paese<sup>2</sup> , Milena Pereira<sup>2</sup> 

### ABSTRACT

**Objective:** We aim to describe factors identified by nurses as challenges and strengths in nursing care for people with wounds in primary health care. **Method:** This is an exploratory, descriptive, qualitative study conducted from September to November 2022, in the Health District Center of the city of Florianópolis, state of Santa Catarina, Brazil. We used an online questionnaire for data collection, and the results were analyzed based on thematic content analysis according to Bardin. **Results:** A total of 29 nurses were included in the sample, of which 28 (97%) reported facing challenges as well as identifying strengths in the daily care of individuals with wounds. Based on data analysis, three categories emerged: "Category 1 – Challenges and strengths related to the nurse's work process"; "Category 2 – Challenges and strengths related to the individual with a wound"; and "Category 3 – Challenges and strengths related to available infrastructure, technological resources, and materials." **Conclusions:** The factors highlighted by nurses as strengths and challenges are related to nursing work focused on the person with a wound and to the available infrastructure, technological resources, and materials. Knowledge of these factors can lead to the implementation of tools to overcome challenges and promote strengths, with the aim of improving the quality of this practice.

**DESCRIPTORS:** Enterostomal therapy. Primary health care. Nursing care. Wounds and injuries. Health care quality, access, and evaluation. Health services accessibility.

## Cuidado de enfermagem à pessoa com ferida na Atenção Primária à Saúde: desafios e potências

### RESUMO

**Objetivo:** descrever fatores identificados pelos enfermeiros como desafios e potências no cuidado de enfermagem à pessoa com ferida na Atenção Primária à Saúde. **Método:** estudo exploratório, descritivo, de abordagem qualitativa, realizado de setembro a novembro de 2022, no Distrito Sanitário Centro de Florianópolis. Utilizou-se para a coleta de dados um questionário *on-line*, cujos resultados foram analisados com base na análise temática do conteúdo de Bardin. **Resultados:** o estudo contou com a participação de 29 enfermeiros, dos quais 28 (97%) relataram enfrentar desafios, assim como identificaram potências no cotidiano de cuidado à pessoa com ferida. Com base na análise dos dados, emergiram três categorias: "Categoria 1 – Desafios e potências relacionadas ao processo de trabalho do enfermeiro"; "Categoria 2 – Desafios e potências relacionadas

<sup>1</sup>Escola de Saúde Pública de Florianópolis, Programa de Residência Multiprofissional em Saúde da Família – Florianópolis (SC), Brasil.

<sup>2</sup>Secretaria Municipal de Saúde, Prefeitura Municipal de Florianópolis – Florianópolis (SC), Brasil.

\*Autora correspondente: [helenaa.mohr@gmail.com](mailto:helenaa.mohr@gmail.com)

Editor de Seção: Manuela de Mendonça F. Coelho 

Recebido: Maio 09, 2023 / Aceito: Dez. 19, 2023

Como citar: Mohr HSS, Soares CF, Loss DS, Belaver GM, Paese F, Pereira M. Cuidado de enfermagem à pessoa com ferida na Atenção Primária à Saúde: desafios e potências. ESTIMA, Braz J Enterostomal Ther. 2024;22:e1437. [https://doi.org/10.30886/estima.v22.1437\\_IN](https://doi.org/10.30886/estima.v22.1437_IN)

à pessoa com ferida”; e “Categoria 3 – Desafios e potências relacionados à infraestrutura e recursos tecnológicos e materiais disponíveis”. **Conclusão:** Os fatores destacados pelos enfermeiros como potências e desafios estão relacionados ao trabalho do enfermeiro, ao indivíduo com ferida e à infraestrutura e recursos tecnológicos e materiais disponíveis. Conhecer esses fatores pode suscitar a implementação de ferramentas para superação dos desafios e promoção das potências, visando fomentar a qualidade dessa prática.

**DESCRITORES:** Estomaterapia. Atenção primária à saúde. Cuidados de enfermagem. Ferimentos e lesões. Qualidade, acesso e avaliação da assistência à saúde. Acesso aos serviços de saúde.

## Atención de enfermería a personas con heridas en atención primaria de salud: desafíos y potencias

### RESUMEN

**Objetivo:** Pretendemos describir los factores identificados por las enfermeras como desafíos y fortalezas en la atención de enfermería para personas con heridas en la atención primaria de salud. **Método:** Se trata de un estudio exploratorio, descriptivo y cualitativo realizado de septiembre a noviembre de 2022, en el Distrito de Salud Centro de la ciudad de Florianópolis, estado de Santa Catarina, Brasil. Utilizamos un cuestionario en línea para la recopilación de datos, y los resultados fueron analizados según el análisis de contenido temático de Bardin. **Resultados:** Un total de 29 enfermeras fueron incluidas en la muestra, de las cuales 28 (97%) informaron enfrentar desafíos y también identificar fortalezas en la atención diaria de individuos con heridas. Basándonos en el análisis de datos, surgieron tres categorías: “Categoría 1 – Desafíos y fortalezas relacionados con el proceso de trabajo de la enfermera”; “Categoría 2 – Desafíos y fortalezas relacionados con el individuo con una herida”; y “Categoría 3 – Desafíos y fortalezas relacionados con la infraestructura disponible, recursos tecnológicos y materiales”. **Conclusiones:** Los factores destacados por las enfermeras como fortalezas y desafíos están relacionados con el trabajo de enfermería centrado en la persona con una herida y con la infraestructura disponible, recursos tecnológicos y materiales. El conocimiento de estos factores puede llevar a la implementación de herramientas para superar desafíos y promover fortalezas, con el objetivo de mejorar la calidad de esta práctica.

**DESCRIPTORES:** Estomaterapia. Atención primaria de salud. Atención de enfermería. Heridas y lesiones. Calidad, acceso y evaluación de la atención de salud. Accesibilidad a los servicios de salud.

## INTRODUCTION

In Brazil, primary health care (PHC) is the gateway for users of the Brazilian Health Care Network (RAS), the coordinator of health care, and the organizer of health actions and services provided. Primary health care is structured on the basis of the Family Health Strategy (FHS) and looks at the individuals in their uniqueness and sociocultural context, aiming at a comprehensive provision of health care<sup>1</sup>.

Contributing to the care of people served in PHC, matrix support, created according to one of the strategies of the Brazilian Unified Health System (SUS) National Policy of Humanization, promotes the exchange of information and the production of health, personalizes reference and counter-reference systems, and acts to strengthen relationships between SUS workers, users, and managers<sup>2</sup>.

The comprehensive health care perspective of PHC is fundamental to the care of people with wounds because of the holistic approach that is essential to this care. Beyond the wound, holistic approach considers individuals in their own singularity as well as the context in which they live, as this context may also influence the healing process<sup>3</sup>.

With regard to the care of persons with wounds in PHC, the nurse is responsible for their assessment and the subsequent implementation of the therapeutic plan as well as the prescription and execution of healing technologies, and the coordination/supervision of the nursing team in the prevention of these injuries and the promotion of health<sup>4</sup>. Thus, the need for the nurse to stay updated and grounded in scientific care is reaffirmed<sup>5</sup>. They also work to develop clinical protocols that

guide the practice of the nursing team, reinforcing the relevance of scientific knowledge and evidence-based professional practice for effective and quality care<sup>4,6,7</sup>.

Caring for a person with a wound is a complex, dynamic, individual process that requires certain conditions to provide quality care, such as adequate infrastructure, appropriate materials and dressings, ongoing education in the field, comprehensive and multiprofessional care and a reference service for support. The presence of these elements can be strengths or contributing factors to the care process, while the absence of them translates into challenges, situations, or obstacles to be overcome<sup>8,9</sup>.

Since nurses play a central role in the care of people with wounds, the need to describe the factors identified as challenges or strengths in the clinical practice of caring for these people in PHC outlines the following research question was: "What are the challenges and strengths identified by nurses in the care of people with wounds in PHC in the city of Florianópolis?"

## OBJECTIVES

We aim to describe the factors identified by nurses as challenges and strengths in the care of people with wounds in PHC.

## MÉTODOS

This is an exploratory, descriptive, qualitative approach study involving nurses from the Health District Center (HDC) of the city of Florianópolis, state of Santa Catarina, Brazil. Participants met the inclusion criteria of being an active nurse in a Family Health Team (FHT) in Florianópolis for at least six months and the exclusion criteria of being on leave, absent, or on vacation during the data collection period and/or being a resident nurse.

The HDC has 11 health centers that include 47 FHTs, each integrated by one nurse. The research invitation was sent via email and mobile phone by one of the researchers to the public email and institutional WhatsApp® contacts of the FHTs to which the potential participating nurses belonged.

Data collection was conducted from September to November 2022 by using a self-administered structured questionnaire developed by the research authors and validated for content by six experts in wound care. The questionnaire was sent to the experts and changes were made in its composition based on the feedback received. After validation, the questionnaire was made available electronically via Google Forms. The questionnaire was structured in two parts: the first part consisted of closed-ended questions about the sociodemographic profile of the participants, and the second part consisted of open-ended questions about the challenges and strengths in the care of people with wounds.

Data analysis was based on the thematic content analysis proposed by Laurence Bardin<sup>10</sup>, organized into pre-analysis (global reading of the material), exploration of the material (categorization), and treatment/interpretation of results and (discussion based on the literature).

This study was conducted according to the Brazilian National Health Council Resolutions No. 466 (December 12, 2012) and No. 510 (April 7, 2016) and was approved by the Human Research Ethics Committee of the State University of Santa Catarina under Opinion No. 5.574.521.

## RESULTS

Out of the 47 FHTs, three nurses were on leave, absent, or on vacation during the data collection period, and one nurse was not selected for the research because she was a co-supervisor of the present study, thereby avoiding potential biases. Of the 43 potential participants, 14 nurses declined to participate in the research. Thus, 29 nurses were included in this study, categorized according to their sociodemographic and professional profiles (Table 1).

Regarding the area of study/specialization of the participating nurses, only one nurse (3.5%) holds a specialization in stomal therapy, and the predominant area of specialization was family health with 13 (45%) nurses.

**Table 1.** Sociodemographic and professional characterization of the nurses surveyed (n=29). Florianópolis, Santa Catarina, Brazil, 2024.

Sociodemographic and professional variables	n	%
Sex		
Female	28	96
Male	1	4
Age group (years)		
Less than 30	1	3,5
From 30 to 40	17	58,5
From 41 to 50	11	38,5
Time since graduation (years)		
From 6 to 10	10	34
From 11 to 19	15	52
From 20 to 25	4	14
Length of experience at FHT in Florianópolis		
From 6 months to 2 years	10	34,5
From 3 to 7 years	12	41
From 10 to 21 years	7	24,5
Weekly workload (hours a week)		
30	6	21
40	23	79
Professional training		
Specialization/postgraduate	22	76
Masters	6	21
Doctorate degree	1	3
Field of professional specialization		
Family health	13	45
Collective health	4	14
ICU and emergency	3	10
Obstetrics	2	7
Stomal therapy	1	3,5
Occupational nursing	1	3,5
Public health	1	3,5
Management of health systems and services	1	3,5
Not specified	3	10

Regarding the challenges and strengths related to the care of individuals with wounds in the PHC of Florianópolis, 28 (97%) nurses reported facing challenges in providing this care, while the same percentage identified strengths in providing this care. Based on the descriptive responses on the topic, the content was organized for better analysis, revealing thematic units grouped by affinities, from which three categories emerged: “Category 1 – Challenges and strengths related to the nurse’s work process”; “Category 2 – Challenges and strengths related to the individual with a wound”; and “Category 3 – Challenges and strengths related to available infrastructure, technological resources, and materials.”

### Category 1 – Challenges and strengths related to the nurse’s work process

Based on the responses collected, one of the challenges highlighted by the participating nurses (N1, N5, N21, N24, and N25) is the “time” aspect of reconciling the demand for care and the nurse’s other daily activities with providing support

within the health centers and caring for people with wounds, especially complex wounds, and the demands of home visits for this purpose.

The performance and difficulty of training the nursing technical team also emerge as challenges in caring for people with wounds (N6, N11, and N21). The nurses N17, N23, and N26 also highlight assessment of the wound and indication of the best topical therapy as a challenge to nursing practice.

As strengths, the nurses highlighted: nursing professionals dedicated to providing the best care, multidisciplinary teamwork aimed at commitment to the population, and comprehensiveness and longitudinality of care (N11, N12, N18, N22, N25, and N27).

Leadership and professional autonomy of the nurse in the care of people with wounds were identified as strengths by the nurses, as well as education and training on the subject (N3, N4, N7, N24), which are regularly provided in the community network.

## Category 2 – Challenges and strengths related to the individual with a wound

The low adherence of the individual to the proposed treatment for both the wound and the comorbidities/underlying conditions in relation to the specific needs of an individual is a challenge mentioned by the nurses (N2, N13, N14).

Wound complexity and healing time were cited as challenges to care (N12 and N18).

Aspects related to psychosocial factors and social vulnerability (e.g., low education, weakened family support network, social conditions with precarious access to food and hygiene, and drug use) are seen by nurses as challenges in this care (N3, N17, N20, and N22).

The bond of the patient and support network with the health care team and the nurse was identified as a strength by the surveyed group (E11, E14, E25). Furthermore, family support, patient engagement and self-care capacity regarding the wound and comorbidities, adequate nutrition and physical activity were identified as conditions which, once present, facilitate the wound healing process (E2, E19).

## Category 3 – Challenges and strengths related to available infrastructure, technological resources, and materials

Of the factors related to infrastructure and available technological and material resources, nurses N8 and N9 consider matrix support and follow-up to be a strength. However, they highlight the temporary lack of the matrix support specialist as a challenge to the support provided.

The time it takes to return after matrixing the case and the delay in the logistics of delivering the necessary materials to start treatment at the health centers, as well as the temporary lack of some coverings, were mentioned as challenges by nurses N1, N2, N5, N9, N10, N14, N22, N25, and N27.

The city of Florianópolis does not have a specific service to deliver the supplies sent by the wound matrix support to the teams. The logistics of delivering these materials are carried out by city vehicles that also perform other functions. The delay in receiving the materials and the unavailability of vehicles for home visits to bedridden/homebound people with wounds were highlighted by respondents as challenges to the teams' care (N3, N10, and N11).

Access to the nursing protocol for wound care, the variety of dressings available in the municipal PHC network, and the and the Florianópolis Matrix Nursing Support in the Care of People with Wounds (MNSCPW) were identified as strengths in the provision of care for people with wounds (N3, N7, N13, N23, and N27).

## DISCUSSION

Nursing care for people with wounds in PHC is complex and influenced by various factors that can either support or challenge the nursing practice in providing this care. According to the factors addressed in Category 1, which are related

to the nursing work process in wound care, the study highlighted challenges such as wound assessment and selection of the best topical treatment.

Similarly, an integrative review in PHC revealed gaps in nurses' knowledge regarding the assessment and management of people with wounds<sup>6</sup>. Nurses' knowledge is essential for effective case management, as wound management requires an understanding of the healing process, etiology of injury, causality of chronicity, comprehensive care management of the individual, and the importance of keeping up to date with wound care treatments<sup>11,12</sup>.

The pursuit of knowledge and updates in the practice of caring for people with wounds reflects the nurse's leadership and professional autonomy, which have been identified as strengths in the present study. Primary health care proves to be a conducive space for the development and expansion of nurses' autonomy, in which most of the care depends on soft technologies (e.g., investment in professional training, continuing education for professionals, and development of evidence-based practices)<sup>13</sup>.

In support of these data, there is an urgent need to invest in the training of the health care team, continuing education, and the establishment of care protocols for the prevention, assessment, and treatment of people with wounds<sup>6,12,14</sup>. These points, presented by the professionals in this research as existing strengths of the PHC in Florianópolis, are promoted by the institution. If the institution lacks the means for improvement, the burden for updating may fall on the nurses<sup>14</sup> and be characterized as a challenge.

In terms of factors related to the nursing work process in wound care, the balance of time and high demand for care, as well as administrative tasks and supervision and training of the nursing technical team in PHC, emerges as a challenge in caring for people with wounds. This condition may be related to the fact that in the FHS there is an overload of various functions beyond the demands relevant to the care of people with wounds, such as meeting targets, agreements, and health service indicators.

The overlap of activities creates a discrepancy between the demand for imposed activities and the conditions offered to them to perform quality work in family health and to respond to spontaneous demand. That overlap can also lead to frustration as nurses have to make conflicting choices, sometimes having to give up one activity (usually one of their specific duties) in favor of another<sup>15</sup>.

The importance of teamwork and multidisciplinary work is identified as a strength in the care of people with wounds. Teamwork involves different professionals, each with a unique role, working together in health care to avoid prolonging treatment and worsening the case, with the goal of the individual's well-being and improved quality of life<sup>3</sup>.

High demand for care from users, work overload, and lack of time for educational activities are challenges for continuing education, which might be related to the difficulties in the supervision and training of the nursing technical team by the nurse. Work overload might also be correlated with the lack of human resources, in which a deficit in the number of professionals available to serve the population burdens the professionals working in the health service and hinders the care and monitoring of the population of the territory<sup>16</sup>.

The shortage of professionals was identified by participants as a challenge related to the temporary absence of the matrix specialist. In their absence, cases are matrixed with managers from other districts, leading to delays in response time due to overload.

Regarding Category 2, PHC has among its essential attributes the comprehensiveness and continuity/linking of care, which were identified as strengths by the nurses. While comprehensiveness corresponds to care that focuses on the individual as a whole and considers all aspects involved, continuity implies the recognition of a regular and continuous source of care and the establishment of a lasting therapeutic bond between service users and the professional team, thereby promoting shared responsibility for care<sup>1,17,18</sup>.

Estrela *et al.*<sup>3</sup> emphasize the importance of taking a comprehensive approach to the individual (not just the wound) and considering factors and characteristics that permeate the individual's context and can alter the healing process, such as clinical, nutritional, psychological, and financial conditions. For example, nurses in this study identified factors related to the individual and the wound as both strengths and challenges, depending on how these factors presented themselves.

Self-care is identified as a strength but can sometimes become a challenge. Oliveira et al.<sup>19</sup> identifies self-care as a strength for caring for people with chronic conditions such as diabetes, systemic arterial hypertension, and wounds. Resende et al.<sup>20</sup> found a deficit in self-care can lead to the development, chronicity, and delay of wound healing, especially complex wounds, and correlates with the socioeconomic-cultural context in which the individual and their family live, such as low education, precarious access to health services, weakened support network and family, and poor hygiene conditions. These factors were also identified by the nurses surveyed in the present study as challenges in caring for people with wounds.

Similarly, diseases such as systemic arterial hypertension, peripheral vascular disease, and diabetes mellitus affect the physiological processes of the body and become risk factors for the development of wounds with delaying in the healing process. Adherence to the therapeutic plan, which includes the treatment of comorbidities and the wound, is essential for a satisfactory healing process of the affected area. Adherence to the therapeutic plan is one of the points listed by the nurses as a challenge when absent and as a strength when present. Of the challenges and strengths, depending on the condition presented, nonadherence to treatment and control of comorbidities can contribute to aggravating the complexity of the condition and prolonging the healing time of the wound<sup>19</sup>.

Category 3, which addressed challenges and strengths related to infrastructure, technological resources, and available materials, allowed us to identify evidence-based practice and guidance through a nursing protocol and matrix support as strengths. Similarly, Oliveira et al.<sup>8</sup> state that standardization of practice through protocols promotes optimization of work time, satisfaction, and safety in the care of people with wounds. In addition, it becomes a useful tool in the training of the nursing team—one of the challenges mentioned by the respondents of the study. Although the development, implementation, and updating of clinical protocols may initially pose challenges for health care institutions, their results contribute to the optimization of professional work and resources used, thereby promoting effective outcomes for patients and reducing costs for the institution.

Regarding material resources/topical treatments, the wide variety available in PHC was seen as a strength in the care provided by nurses, while the lack of some coverings, even if temporary, was noted as a challenge. Costa et al.<sup>12</sup> stress the importance of material and human resources to promote quality care. In this study, despite the training and efforts of professionals to update their knowledge in wound care, they were unable to fully apply the acquired knowledge in practice due to a lack of material resources, which proved to be a challenge for improving care in PHC.

Wound management is a constantly evolving area of care, with new management technologies being introduced on an ongoing basis. When used appropriately, these technologies can promote wound healing, improve the quality of life of individuals, and optimize public expenditures<sup>21</sup>.

In our study, the MNSCPW proved to be a strength in care. Created in 2019, the MNSCPW was designed to address the health challenges posed by the growing number of people with wounds, especially complex ones. The MNSCPW aims to expand, qualify, and decentralize access, strengthen collaboration among professionals, thereby optimizing available public resources and valuing the nursing, the science, and the Brazilian Unified Health System (SUS)<sup>22</sup>.

In line with these goals, Bispo Júnior and Moreira<sup>23</sup> highlight as one of the main aspects of matrix support the sharing of care between the nurse from the FHS and the matrix nurse. The role of matrix support is therefore emphasized in sharing knowledge through knowing, reflecting, doing, teaching, and learning.

With regard to the MNSCPW, the challenges mentioned included: the time required for feedback after the case has been sent to the support matrix in the district concerned, delays in the delivery of supplies to health centers due to current logistics, and the supply of some of these materials. Soares et al.<sup>22</sup> stress one of the challenges evident in the implementation of matrix support is the fragility of lacking adequate material and human resources to meet demand. The importance of professionals requesting matrix support experiencing the practice of the matrix professional is emphasized in order to strengthen the bond between these professionals and thus avoid misunderstandings, unrealistic expectations about each other's work, and conflicts among those who should be working together<sup>23</sup>.

The use of WhatsApp® stands out as a strategy for the integration of services and professionals involved in service management since it allows the exchange of information in real time, which brings the professionals involved in the work process closer together and facilitates the manager's actions through the various resources available on the application. However, if we consider that being connected to a smartphone today means being available, which leads to communication

that tends towards immediacy, a disadvantage of its use becomes apparent, related to the lack of agreement on what is considered urgent by professionals. This may lead to an expectation of an immediate response, regardless of the topic or issue<sup>24</sup>, which may be related to nurses' reports of delays in the matrix nurse's response since WhatsApp® is a communication channel, along with email, between the FHS nurse and the matrix nurse.

Regarding the delay in receiving materials, which was also highlighted as a challenge, although the separation of materials is carried out by the matrix nurse, the logistics of delivering the materials is handled by an external service to the material support. Thus, we can correlate the delay in the delivery of these materials with the lack of a specific service for these deliveries. Similarly, the lack of availability of vehicles for home visits was pointed out as a challenge, especially for patients who need these visits frequently, such as those confined to bed/home and others who have difficulty accessing the health center, which is in line with the previously mentioned fragility regarding adequate material and human resources to meet demand.

Limitations of this study include the fact that it was conducted in only one health district of Florianópolis. Therefore, similar studies should be conducted in other health districts. Nevertheless, we believe our data might promote the development of opportunities to overcome challenges and promote strengths regarding the issue addressed.

## CONCLUSION

Nurses experience challenges and strengths in their professional practice that might influence the care provided. From the present study, the strengths of nursing care for people with wounds in PHC include teamwork/multiprofessional care, comprehensive and longitudinal care, user involvement, and nurse leadership and autonomy. These conditions have been built and achieved over time and are important for strengthening nursing and SUS.

Time management coupled with nursing demands and sometimes administrative tasks, wound assessment, recommending the best topical therapy and training the nursing technical team were highlighted as challenges that cross the nursing work process. This underlines the importance of appropriate working conditions for the nurse to excel in their role of leading the care of people with wounds as well as supervising and training the nursing team.

Factors related to the individual (e.g., bond with the health care team, patient adherence to wound and comorbidity treatment, wound complexity, healing time, support network, and psychosocial context) were identified as both strengths (when present, such as adherence and bond) and challenges (when absent, such as fragile support network and vulnerable psychosocial context). This reinforces the importance of comprehensive care and holistic approach applied to nursing care.

The quality of care provided, the care protocol, the matrix support, and the variety of coverings available are strengths of PHC in Florianópolis. The importance of the management perspective is emphasized to overcome the challenges that permeate these practices.

By highlighting the nurse's practice in wound care, the goal is to encourage the implementation of tools that promote overcoming challenges and enhancing identified strengths, aiming at promoting effective, evidence-based nursing practice and quality care for people with wounds in PHC.

**Conflict of interest:** None.

**Authors' contributions:** HSSM: formal analysis, project management, conceptualization, data curation, writing – first draft, writing – review and editing, research, methodology, visualization. CFS: formal analysis, conceptualization, writing – first draft, writing – review and editing, methodology, supervision; visualization. DSL: formal analysis, conceptualization, writing – first draft, writing – proofreading and editing, methodology, supervision, visualization. GMB: writing – review and editing, validation; visualization. FP: writing – review and editing, validation, visualization. MP: writing – review and editing, validation, visualization.

**Availability of research data:** All data was generated or analyzed in this study.

**Financing:** Does not apply.

**Acknowledgments:** Does not apply.



## REFERENCES

1. Brasil. Ministério da Saúde. Gabinete do Ministro. Portaria nº 2.436, de 21 de setembro de 2017. Aprova a Política Nacional de Atenção Básica, estabelecendo a revisão de diretrizes para a organização da atenção básica, no âmbito do Sistema Único de Saúde (SUS). Brasília: Diário Oficial da União; 2017 [accessed on 15 jan. 2023]. Available from: [https://bvsms.saude.gov.br/bvs/saudelegis/gm/2017/prt2436\\_22\\_09\\_2017.html](https://bvsms.saude.gov.br/bvs/saudelegis/gm/2017/prt2436_22_09_2017.html)
2. Iglesias A, Avellar LZ. Matriciamento em saúde mental: práticas e concepções trazidas por equipes de referência, matriciadores e gestores. *Ciênc Saúde Colet*. 2019;24(4):1247-54. <https://doi.org/10.1590/1413-81232018244.05362017>
3. Estrela FM, Lima NS, David RAR, Bacelar DM, Silva JS, Ruas AMS, Bina GM, Pereira AO, Miranda MC, Reis RP, Silva GN, Santos Neto CV, França SL, Sousa ALM, Silva TG, Costa OS, Maltez GCA, Moreira ABRM, Silva DS, Bernardino LCS, Pereira ACO, Araujo NA, Silva PB, Lima AM. Preparation of a multiprofessional care protocol for people with complex wounds in primary health care. *Braz J Dev*. 2021 Aug 20;7(8):83118-39. <https://doi.org/10.34117/bjdv7n8-494>
4. Conselho Federal de Enfermagem. Resolução COFEN nº.567/2018 de 7 de fevereiro de 2018. Regulamenta a atuação da equipe de enfermagem no cuidado aos pacientes com feridas. Diário Oficial da União; 2018 [accessed on 3 mar. 2022]. Available from: [http://www.cofen.gov.br/resolucao-cofen-no-567-2018\\_60340.html](http://www.cofen.gov.br/resolucao-cofen-no-567-2018_60340.html)
5. Rodrigues MELS, Antonio PLC, Oliveira ER, Silveira GC. Importância da atuação de enfermagem nos cuidados das feridas. In: Sousa IC, editor. Promoção da saúde e qualidade de vida. Ponta Grossa: Atena; 2022. p. 148-60. <https://doi.org/10.22533/at.ed.72622260818>
6. Sousa MBV, Bezerra AMFA, Costa CV, Gomes EB, Fonseca HTA, Quaresma OB, Baena Júnior ORG, Costa SDM, Loureiro SPSC, Silva SM. Assistência de enfermagem no cuidado de feridas na atenção primária em saúde: revisão integrativa. *REAS*. 2020;(48):e3303. <https://doi.org/10.25248/reas.e3303.2020>
7. Silva Filho BF, Duque CB, Yarid SD, Souza Júnior EV, Sena ELS, Boery RNSO. Autonomia do enfermeiro no cuidado à pessoa com lesão crônica. *Rev Bioét*. 2021 Jul;29(3):481-6. <https://doi.org/10.1590/1983-80422021293484>
8. Oliveira AP, Rodrigues MP, Melo RHV, Vilar RLA, Sampaio ATL. Visão de enfermeiros sobre um protocolo de prevenção e tratamento de feridas. *Av Enferm*. 2021;39(3):345-5. <https://doi.org/10.15446/av.enferm.v39n3.87104>
9. Vieira CPB, Araújo TME. Prevalência e fatores associados a feridas crônicas em idosos na atenção básica. *Rev Esc Enferm USP*. 2018;52:e03415. <https://doi.org/10.1590/S1980-220X2017051303415>
10. Bardin L. Análise de conteúdo. Lisboa: Edições 70; 2011.
11. Andrade RV, Almeida LDAL, Galdino RM, Brito ES, Ribeiro RN, Magalhães MSSP, Costa JG, Pimentel MSSM. Avaliação da ferida e cuidados do enfermeiro em pacientes diabéticos portadores de úlcera venosa. *REAS*. 2020;48:e3070. <https://doi.org/10.25248/reas.e3070.2020>
12. Costa JAS, Pitella CQP, Lopes APR, Caetano LCO, Santos KB. Conhecimento dos enfermeiros sobre tratamento de feridas crônicas na atenção primária à saúde. *Rev. Enferm Atual In Derme* 2022;96(37):e-021199. <https://doi.org/10.31011/read-2022-v.96-n.37-art.1282>
13. Rewa T, Miranda Neto MV, Bonfim D, Leonello VM, Oliveira MA. Práticas Avançadas de Enfermagem: percepção de egressos da residência e do mestrado profissional. *Acta Paul Enferm*. 2019;32(3):254-60. <https://doi.org/10.1590/1982-0194201900035>
14. Jaques DF, Silva SF, Santos AA, Resende MA, Calsavara RA, Barros PA, Souza G. A prevenção de lesão por pressão em pacientes acompanhados pelo enfermeiro da estratégia de saúde da família. *REAS*. 2020;50:e2313. <https://doi.org/10.25248/reas.e2313.2020>
15. Ferreira SRS, Périco LAD, Dias VRFG. The complexity of the work of nurses in Primary Health Care. *Rev Bras Enferm*. 2018;71(supl 1):784-9. <https://doi.org/10.1590/0034-7167-2017-0471>
16. Braghetto GT, Sousa LA, Beretta D, Vendramini SHF. Dificuldades e facilidades do enfermeiro da Saúde da Família no processo de trabalho. *Cad Saúde Colet*. 2019;27(4):420-6. <https://doi.org/10.1590/1414-462X201900040100>
17. Gasparini MFV, Furtado JP. Longitudinalidade e integralidade no Programa Mais Médicos: um estudo avaliativo. *Saúde Debate*. 2019 Jan;43(120):30-42. <https://doi.org/10.1590/0103-1104201912002>
18. Kessler M, Lima SBS, Weiller TH, Lopes LFD, Ferraz L, Eberhardt TD, Soares RSA, Trindade LL. Longitudinalidade do cuidado na atenção primária: avaliação na perspectiva dos usuários. *Acta Paul Enferm*. 2019 Mar;32(2):186-93. <https://doi.org/10.1590/1982-0194201900026>
19. Oliveira CM, Marques JPC, Machado WD, Gomes DM, Freitas CASL, Silva MAM, Albuquerque IMN. Cuidado a famílias com pessoas em condições crônicas na atenção primária à saúde: revisão integrativa. *Ciênc Cuid Saúde*. 2021;20:e54403. <http://dx.doi.org/10.4025/cienccuidsaude.v20i0.54403>

20. Resende NM, Nascimento TC, Lopes FRF, Prates Júnior AG, Souza NM. Cuidado de pessoas com feridas crônicas na Atenção Primária à Saúde. *J Manag Prim Health Care*. 2017 Ago;8(1):99-108. <https://doi.org/10.14295/jmphc.v8i1.271>
21. Zhou JQ, Huang LF, Lu YC, Li Q, Ma X, Tang JJ, Niu YW, Lu SL. Prevalence and prognosis of hard-to-heal wounds with comorbidities in China. *J Wound Care*. 2022;31(Sup 10):S7-S15. <https://doi.org/10.12968/jowc.2022.31.Sup10.S7>
22. Soares CF, Belaver GM, Maria JR, Pereira M, Schmitz LM, Siqueira EF, Báfica ACM, Gomes AMB. Apoio matricial de enfermagem como inovação no cuidado à pessoa com ferida. *Enferm Foco*. 2021;12(Supl. 1):82-6. <https://doi.org/10.21675/2357-707X.2021.v12.n7.SUPL.1.5194>
23. Bispo Júnior JP, Moreira DC. Educação permanente e apoio matricial: formação, vivências e práticas dos profissionais dos Núcleos de Apoio à Saúde da Família e das equipes apoiadas. *Cad Saúde Pública*. 2017;33(9):e00108116. <https://doi.org/10.1590/0102-311X00108116>
24. Savio RO, Barreto MFC, Pedro DRC, Costa RG, Rossaneis MA, Silva LGC, Aroni O, Haddad MCFL. Uso do WhatsApp® por gestores de serviços de saúde. *Acta Paul Enferm*. 2021;34:eAPE001695. <https://doi.org/10.37689/acta-ape/2021AO001695>