The Nurse’s Work Process in Primary Health Care: an Integrative Review

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Abstract
Objective. This work sought to analyze the scientific production regarding the work process of nurses in Primary Health Care in the Colombian context. Methodology. Integrative literature review. The research question was: how is the work process of nurses in Primary Health Care in Colombia? Information collection was carried out during August and September 2021. The databases consulted were: SCOPUS, LILACS, Science Direct, VHL, PubMed and the SciELO electronic library. The inclusion criteria were: original articles published between 2015 and 2021. Results. Three articles were selected to comprise the final sample. Three thematic categories emerged from the results for analysis: knowledge of nursing professionals about PHC; barriers in the work process of nursing professionals in PHC; nursing professional practices in PHC. Conclusions. This review of the literature revealed lack of scientific evidence concerning the role of nursing professionals in primary care in Colombia. It is essential to elucidate the role of nurses in primary care to continue on the path of consolidating and improving actions and strategies, especially in the current context of policy reform of the Colombian health system and the global interests to strengthen primary care.

Key words
Primary health care; primary care nursing; role; Colombia; community health nursing (DeCS, BIREME).
Resumen

Objetivo: Analizar la producción científica referente al proceso de trabajo de enfermeros en la Atención Primaria de Salud en el contexto colombiano. Metodología: Revisión integrativa de la literatura. La pregunta de investigación fue ¿cómo es el proceso de trabajo del enfermero en la Atención Primaria de Salud en Colombia? La recolección de información se realizó durante agosto y septiembre de 2021. Las bases de datos consultadas fueron: SCOPUS, LILACS, Science Direct, BVS, PubMed y la biblioteca electrónica SciELO. Los criterios de inclusión fueron: artículos originales publicados entre 2015 y 2021. Resultados: Fueron seleccionados tres artículos para componer la muestra final. De los resultados emergieron tres categorías temáticas para el análisis: conocimientos del profesional de enfermería sobre APS; barreras en el proceso de trabajo del profesional de enfermería en APS; prácticas del profesional de enfermería en la APS. Conclusiones: La presente revisión de la literatura reveló una escasez de evidencia científica concerniente al rol del profesional de enfermería en la atención primaria en Colombia. Dilucidar el rol del enfermero en la atención primaria se configura como una necesidad prioritaria para continuar en el camino de consolidación y mejoramiento de las acciones y estrategias, especialmente, en el actual contexto de reforma política del sistema de salud colombiano y de los intereses mundiales de fortalecer la atención primaria.

Palabras clave
Atención primaria de salud; enfermería de atención primaria; rol; Colombia; enfermería en salud comunitaria (DeCS, BIREME).

Processo de trabalho do enfermeiro na atenção primaria de saúde: uma revisão integrativa

Resumo


Palavras chave
Atenção primaria de saúde; enfermagem de atenção primaria; rol; Colômbia; enfermagem em saúde comunitária (DeCS, BIREME).
**Introduction**

The Alma-Ata Declaration defined Primary Health Care (PHC) as: “essential health care based on methods and practical technologies, scientifically based and socially acceptable; so that with self-responsibility and determination the subjects, families and communities can achieve and participate in such throughout all moments during the course of life, always framed in sustainable actions by the community and the country. Primary health care is an integral part of national health systems, of which it constitutes the central function and principal nucleus, as well as of the global social and economic development of the community” (1).

The SGSSS (Colombian General System on Health Social Security, Sistema General de Seguridad Social en Salud), established by Legislation 100 of 1993 (2), has had structural reforms through different norms that seek to transform the health care model, which tend to generate conditions that protect the health of Colombians and, mainly, to improve the wellbeing of users through public policies.

For decades, important global statements like the Alma-Ata Declaration, “Health for all by 2000”, the “Millennium Development Goals”, and the “Astana Declaration”, among others, postulate important strategies that seek to achieve better health conditions for the entire population. Hence, and by articulating the mentioned statements, Colombia has implemented, since 2011, different norms to comply with the objectives related to the health of individuals. For instance, Legislation 1438 of 2011 (3) postulates in its Article 2 the orientation of the SGSSS within the framework of a PHC strategy, and Legislation 1751 of 2015 (4) regulates the fundamental right to health of Colombians. The aforementioned become the greatest antecedent for the institutionalization of the new PCHC (Policy on Comprehensive Health Care, Política de Atención Integral en Salud) through Resolution 0429 of 2016 (5), which defines PHC as a fundamental and priority strategic framework to structure and operationalize the actions proposed in said resolution. The PHC proposed by the new health policy focuses on family and community health with respect to care, comprehensive risk management, and specific actions to address the needs of the different territories and populations (6).

Regarding the PHC work process, the PCHC proposes the conformation of multidisciplinary health teams (5) in which nurses are important members because of the fundamental role they play in the development of the process of caring for individuals, families, and collectives. It also emphasizes that the CIE (International Nursing Council, Consejo Internacional de Enfermeras), the oldest international professional organization, states that nurses have 4 fundamental functions: to promote health, to prevent disease, to restore health, and to alleviate suffering (7), thus, nursing may be considered an elemental discipline in the development of this new proposal on comprehensive health care.

With relation to the concept of the “health work process”, it is suitable to indicate first that work is an activity that always has a purpose, which, in the health setting, refers to solving human needs. Such needs are organized into four big groups: good living conditions, access to health technologies, effective emotional bonds between professionals and users, increased degrees of autonomy in a person’s life (8).

Consequently, the concept of “health work process” refers to the microscopic dimension of everyday health work, that is, to the practice of workers/professionals immersed in the day-
to-day of the production and consumption of health services (9). Among the peculiarities of the health work process, the following elements that comprise it are analyzed: the work object (represents what will be transformed, i.e., human needs); instruments (a set of technologies that health workers introduce between themselves and the work object and that guides their activity over the object); the purpose and the agents (the users and workers of health services (10-12).

In the health work process, three types of technologies are differentiated: a) “hard” technologies inscribed in machines, equipment, diagnostic aids, and instruments; b) “slightly hard” technologies that refer to technical-scientific knowledge and the way health care workers apply such; c) “light” technologies that refer to interpersonal relations, generation of bonds, i.e., non-material technologies (13).

Thus, current scientific, technological, and political evolution is bringing forth many great transformations in the organizational structures and in the exercise of nursing professionals, which demand ever-increasing and consequential scientific knowledge, a proportional increase of responsibilities (14,15). However, competences and profiles of human resources in PHC are insufficient to effectively solve health necessities and problems, which creates a buildup of health care demands (5,16). Hence, from the work process, it is fundamental to transform the actions of the health staff, specifically those performed by nurses, as highlighted by Limon, Blay, and Ledesma (17), who state that in order for the PHC staff to implement a pertinent care model, they require new settings for clinical management and educational skills training to reduce the different barriers and difficulties analyzed in the current service provided.

It should be pointed out that the role of the nursing professional is not quite clear for administrators and health service providers; also, the work by the health staff is not articulated with the principles of the PHC strategy (18). As a consequence, it is important to organize and manage the health work processes, especially the work in PHC since it is one of the central axes in reorienting health care in the new PCHC, therefore, it is necessary to delve deeper into the knowledge on the work process of nursing professionals in PHC.

Thereby, this integrative literature review sought to broaden the visibility of the nursing professionals’ actions, by strengthening their professional identity and by introducing reflections that can contribute to the transformation and classification of the professional practices in PHC. The aim of this study was to analyze the scientific production regarding the work process of nurses in primary health care within the Colombian context.

**Materials and methods**

To reach the objective, an integrative literature review was conducted; it was considered a strategy provided by the search, critical evaluation, and synthesis of the evidence available on the object of study. The final product was a current state of knowledge on the matter (19, 20) that can be used in various topics or study designs and contribute to the nursing practice based on scientific evidence, which permits looking for, compiling, categorizing, evaluating, and synthesizing the results obtained, which focus on the work process of nurses in primary health care in Colombia (19).
This integrative review was conducted by adhering to the following six stages (21): a) identification of the research question; b) literature search; c) categorization of the studies; d) evaluation of the studies selected; e) interpretation of the results; f) presentation of the review.

Identification of the research question: the guiding question was structured according with the PICo acronym, as follows: P (Population): nursing professionals; I (Interest): work process; Co (Context): Colombia.

Literature search: it was performed from August to September 2021 in the databases: SCOPUS, LILACS (Latin American and Caribbean Literature in Health Sciences, Literatura Latinoamericana y del Caribe en Ciencias de la Salud), BVS (Virtual Health Library, Biblioteca Virtual en Salud), ScienceDirect, PubMed and SciELO electronic library. The following descriptors consulted in DeCS (Descriptors in Health Sciences, Descriptores en Ciencias de la Salud) were used from the BVS in Spanish: role of nursing; primary health care. The descriptors were combined using the Boolean operator AND.

The inclusion criteria established for the bibliographic search were: full original articles, studies published between 2015 and 2021, country region and Colombian origin; the review included studies in Portuguese, English, and Spanish. The work excluded articles that did not answer the guiding research question, articles repeated in two or more databases, review or opinion articles, or letters from editors (Figure 1).

To obtain the data, an information collection instrument designed by the researchers was used. It included the following items: code, database, title of the study, year of publication, authors, objective, methodological approach, and principal results. The search process, evaluation, and selection of the studies followed the following filters: first: reading titles and abstracts, followed by the selection based on the suitability for the topic researched; second: reading the full text, seeking responses to the research question; third: reading the full text in detail, based on the criterion used in filter 2 and aiming for a better identification and comprehension of the data. The search was conducted by the three researchers, who, in a meeting, selected the same studies once the three filters were completed. The data obtained were analyzed through a qualitative approach, with the content analysis technique based on the responses obtained from the texts selected.
Figure 1. Description of the selection process of the studies in the integrative review.
Armenia, Quindio, Colombia, 2022.
Source: Compiled by the authors.
### Results

The initial search allowed obtaining 2,498 articles. After reading their titles and abstracts, three met the inclusion and exclusion criteria and showed important contributions for the study, therefore, they were selected for the final sample. Each of these articles were analyzed in depth; their characteristics was then organized and systematized, as shown in Table 1.

<table>
<thead>
<tr>
<th>Code</th>
<th>Database</th>
<th>Title</th>
<th>Journal</th>
<th>Year of publication</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1 (22)</td>
<td>LILACS</td>
<td>Primary health care. A vision from nursing professionals Barriers, knowledge and activities Barranquilla (Colombia) 2015</td>
<td>Salud Uninorte.</td>
<td>Colombia. 2015</td>
</tr>
<tr>
<td>A3 (24)</td>
<td>LILACS</td>
<td>Nursing Work Process in Primary Health Care: observational study</td>
<td>Rev. cienc. cuidad.</td>
<td>Colombia. 2021</td>
</tr>
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</table>

Source: Compiled by the authors. Armenia, 2022.

The three studies selected were published in 2015, 2016, and 2021, respectively. Articles A1 and A3 were published in national indexed journals and article A2 in an international disciplinary journal. The search did not show any study published between 2017 and 2020; considering that the new PCHC in Colombia was institutionalized in 2016, poor scientific production regarding the topic of the work by nursing professionals in PHC within the Colombian context was identified.

The authors of article A1 holds an undergraduate nursing degree, a Master’s in nursing with emphasis on chronic patient care, and a PhD in preventive medicine and public health, all with institutional filiation to a university located in the northern region of Colombia. The authors of article A2 are nursing students and professors, with institutional links in different international higher education institutions, like University of Pennsylvania, George Washington University, University of North Carolina in the United States and from Universidad de los Andes in Chile. Although the authors of article A2 have no institutional filiation in Colombia, the study was conducted with nursing professionals from 26 Latin American countries, including Colombia, that belong to the nursing network of the Pan-American Health Organization (PAHO). The authors of article A3 are professors and researchers of universities from Colombia’s central region.

Regarding the type of study, articles A1 and A2 are quantitative with a descriptive and transversal approach; article A3 is of qualitative
nature with an observational approach. Article A1 conducted surveys with 79 nurses working in PHC centers and institutions in the public and private sectors of the city of Barranquilla. The survey had eight questions that address aspects related with basic and functional PHC knowledge about providing care services.

Article A2 performed an on-line survey with 173 nurses from 26 countries; the questions addressed topics related with the definition of the role of nursing, work environment, regulation and education in PHC. Colombia was the second country with the highest number of participants (n = 20), preceded by Brazil (n = 59). Most of the nurses surveyed have a graduate level of education, specifically, PhD and post-doctoral degrees.

Study A3 was carried out in an ESE (State Social Enterprise, Empresa Social del Estado) that provides PHC services in Colombia; the data collection process was performed through non-participant observation. The sample was comprised of four nursing professionals, selected intentionally in function of their roles and activities developed within the context of PHC in the municipality chosen.

From the detailed analysis of the results obtained, three thematic categories that responded the research question and the objective proposed were constructed: knowledge by nursing professionals on PHC, barriers in the work process of nursing professionals in PHC, and practices of nursing professionals in PHC.

Knowledge by nursing professionals on PHC

Study A1 (22) evidenced that over half of the nurses who participated in the study did not pass the test of basic knowledge of PHC, which was administered by the researchers, the conclusion was that the knowledge of nurses about PHC and its appropriation are deficient. Knowledge on PHC measured in the survey showed that: a) 14% are unaware that the acronym PHC refers to primary health care; b) 32.9% have no knowledge of the Alma-Ata Conference, therefore, they ignore that PHC emerged from said international conference; c) 79.7% admits that PHC must be implemented throughout the SGSSS in Colombia; d) only 1 out of every 4 nurses identifies universal access as an essential element of PHC; e) overall, the participants ignore that team work in PHC requires flexibility, technical autonomy, and communication skills; f) 57% recognize that work in PHC must involve public and private participation; g) 44% identified health promotion activities and disease prevention as characteristic of the work in PHC.

In article A2 (23), 93% of the participating nurses identified the need to undertake an internship or clinical rotation in PHC during the undergraduate training. Most of them showed interest in conducting advanced nursing studies in PHC; however, it is interesting that they express not trusting the ability of teachers to deliver training programs at this level. Additionally, 70% believe the professors are prepared to teach advanced courses on PHC, but 26% do not agree.

In article A3 (24), the technical-scientific knowledge of the nursing professionals identified is related to characteristics of the discipline, to PHC and to technical abilities to provide attention and care. Moreover, in the Colombian context there are deficiencies in knowledge regarding the basic and structural concepts of PHC, the meaning of the PHC acronym, the policy, norms, field of action, characteristics, and emphasis.

Most of the surveyed participants in article A1 (22) had an undergraduate education level
and specialization was their highest level of education (1.3%); participants without specialization studies complement their undergraduate formation with continuous education activities, like diploma courses. Upon establishing association among the variables, the job seniority variable is associated with level of knowledge, which means that greater seniority, the greater knowledge on PHC.

**Barriers of the work process in nursing professionals in PHC**

Article A1 showed the greatest number of barriers in the work process of nurses in the context of PHC, the main ones are the current policies and programs of the national government since they limit health access equity. Geographic, organizational, and economic barriers were also evidenced in the work process. Besides, waiting times for users (> 30 min.) and poor participation in programs and epidemiological surveillance strategies were identified as well.

The main barriers identified in article A2 are related with the predominant and persistent biomedical model in health care, precarious working and contractual conditions, and mass migration of human talent to other countries.

In turn, article A3 evidenced lack of time for nursing consultations, which often is limited or insufficient; and the sense of helplessness some nurses express because they are not able to guarantee comprehensive and holistic care.

**Practices by nursing professionals in PHC**

The studies analyzed showed that the practices developed by nursing professionals in the PHC context are segmented into two subgroups: (1) management practices and (2) assistance and/or care practices.

In articles A2 and A3, management practices were related with managing and filling out clinical charts through information systems to offer information and instructions to patients on how to carry out the transfer process of IPS (Service Provider Institutions, Instituciones Prestadoras de Salud), to participate in epidemiology surveillance activities, environmental control and management activities; these last activities are conducted less frequently.

Article A1 identified assistance and/or care practices related with analysis of the health situation of the population involved and with health promotion and disease prevention. However, no clarity exists on which promotion and prevention activities are referred. It is also worth mentioning that the authors express that promotion and prevention activities are those which nurses conduct with less frequency in their daily practices.

**Discussion**

Primary health care can be understood as a field of forces and struggles, which exist permanently for their support or transformation; it is also understood as a setting where knowledge is developed and practices are constructed around work objects that support their existence (25).

With regard to basic knowledge related with PHC, deficiencies were identified in the participants. The Colombian Ministry of Health embraced PHC as a priority strategy to reorganize practices in the Colombian health system through Resolution 0429 of 2016 (5), which adopts the new PCHC and defines the MAITE (Model of Integral Territorial Action, Modelo de Atención Integral Territorial) through Resolution 2626 of 2019 (26), where nurses are responsible for integrating
theoretical knowledge and practical skills related with health and, specifically, with PHC. The results showed the need to classify the knowledge of undergraduate faculty staff in nursing programs and the interest expressed by students of complementing their formation with advanced and solid PHC knowledge referring from academic settings. Education is an essential component in the nurse’s role, inasmuch as it is a substantive function for the training and enhancement of care and management practices in PHC (27). Therefore, PHC education, innovation and constant updating of nurses are required in order to respond to the needs and problems of the population and of the health care system (28).

The function of the nurse’s professor must be to generate integral transformations in society and the health care context, through the development and encouragement of students to observe, reflect, and make teamwork decisions so that students develop a set of skills and attitudes to act in benefit of society (29).

Besides, a solid knowledge base in PHC, accompanied and guided by experts, can strengthen and maximize competencies and the job performance of students and future nursing professionals (30).

The relationship between the level of training and job seniority was highlighted as determinant elements for knowledge on PHC. Article A1 evidenced that professionals do not pass the graduate specialization training and that only 10% of those surveyed individuals have six or more years of job seniority, which is why it is important to maintain and broaden knowledge through regional and international knowledge networks that permit their exchange, as proposed by the PAHO and WHO (31). This was also referenced by Aguirre (32) who highlights that community nurses start acquiring knowledge and tools to assume new tasks upon the demands by the population through graduate studies.

With respect to work process barriers of nursing professionals in PHC, conflicts related to professional exercise and to expectations they project over their performance are salient. Said conflicts emerge from the permanent struggle to produce new ways of practicing health, within a prevalent context of ideological aspects that reinforce the traditional biomedical model. Results from another work (33) share the same difficulties experienced by nurses within the PHC context; those issues from the hegemony and prevalence of a traditional care model centered on the pathology and the biomedical practice.

Conflicts related with the nurse’s professional exercise refer to the limited equity in the distribution of health resources and services, as a consequence of some programs and public policies; thus, from this work process, it is fundamental to transform the actions of the health staff, specially nurses (34). Therefore, the PCHC policy brings forth in its guidelines of scope and development an opportunity for change in the actions of health services agents in academic training and in the organization of the health care system, considering that PHC is its fundamental and integrating strategy (5).

The role of nursing professionals is not recognized in the work they perform; however, different authors defend that the role should be clear and with a distinction of responsibility for nursing professionals in PHC (35-37). The presence of the nurse as a key member of the health staff is highlighted because their exercise is characterized by the promotion and maintenance of bonds in relationships among people, families, communities, and the health system by working autonomously.
and in collaboration to prevent disease and to promote, improve, maintain, and restore health (36).

The role of nursing professionals bears great importance with regards to new changes in the care model proposed by the new PCHC in Colombia because they can contribute and become valuable agents in the design and implementation of the policy’s operational characteristics to carry out the strategies, considering that the aim of the nursing disciplinary action is health care. Besides, it is a must to recognize the characteristic theories of the discipline whose paradigms focus on self-care (38), transcultural care (39,40), and some other elements and knowledge from health sciences, which can enable nurses to face great challenges in this new model of comprehensive health care.

With regard to nursing professionals practices in PHC, the studies analyzed reported that nurses play a preponderant role in services administration and management and in care activities coordination carried out by the health staff (41). Thus, nursing professionals perform care and management actions simultaneously. However, the predominance of management practices yields results that place nurses in the administrative position of care (42).

In other studies, authors share the same perspective experienced in the international scenario, specifically in Brazil, where the work of nursing professionals linked to technical work and focused on administrative and bureaucratic practices is controversial since a work process guided by comprehensive care is expected in the PHC context (34). Human resource actions, verification of pending issues, reposition of materials and inputs, and feeding information systems are among the management practices carried out by nurses (43).

Accordingly, it is interesting to ponder if nursing professionals are aware of this double movement in their professional practice. On the one hand, the work centered on maintenance and good operation of the institution to preserve the client-service relationship and, on the other hand, centered on patient care. These two perspectives of comprehensive care and attention are problematic (43).

The nurses who participated in the studies analyzed in this review recognize health promotion activities and disease prevention as the nurse’s nuclear practices in the PHC context. Considering the responsibilities foreseen by the new PCHC, which privilege health promotion by sponsoring the culture of self-care (5), it can be deduced that they are considered partially, given the prevalence of specific management practices, to the detriment of direct assistance and/or attention to users, families and communities. (44).

In Colombia, the professional nursing practice is regulated by Legislation 266 of 1996 (45) and Legislation 911 of 2004 (46), which define the parameters of the functions of the profession. Some of them contribute specifically to individuals, families, and communities that acquire skills to promote their self-care, within the framework of health promotion and disease prevention.

Considering the importance that nurses attribute to health promotion and disease prevention practices in PHC, it is pertinent to establish said concepts. Health promotion consists in actions that contribute to improving health by people, families, and communities by taking greater control and leadership through direct and sustainable social participation (47). For PHC, health promotion is the core of their actions in national and international systems (48,49).
Disease prevention is the set of actions and measures instituted to diminish the onset of risks related with diseases or with certain unhealthy behaviors (50,51).

Nevertheless, in Latin American and the Caribbean countries, nurses face difficulties in implementing their role of advanced practice in PHC due to their lack of proper training on the matter.

**Conclusions**

This literature review showed that there is not enough scientific evidence concerning the subject of work process of nursing professionals in PHC in Colombia. From an academic perspective, it is necessary to enhance the knowledge of nursing professionals in PHC by including that subject in undergraduate program curricula. Likewise, from the labor field requires an articulation with those responsible for the SGSSS, who should strive for the qualification of health professionals.

Validation of knowledge acquired through experience in relation with job seniority must encourage organizations and those responsible for the SGSSS to offer and guarantee conditions of job stability and qualification spaces in their areas of action to nursing professionals.

Elucidating the role of nurses in primary care is a priority need to continue on the path to consolidate and improve actions and strategies, especially, within the current policy reform context of the Colombian health system and the global interests in strengthening primary care. Nurses’ practices are visualized in two big groups, those of management and those of care, the former predominates and emphasizes the input of medical records through information systems.

The creation of the new Policy on Comprehensive Health Care in Colombia means important progress regarding the consolidation and strengthening of PHC as principal and integrating strategy for the comprehensiveness of health care.

To achieve the challenges proposed by the new Policy on Comprehensive Health Care in the Colombian context, it is deemed necessary to strengthen research on the micro-policy of PHC services at regional and national levels in order to understand what occurs within said context and improve the organized social response of the health systems and services. Future studies are proposed to address characterization and qualification of the nursing human resource and their work process to guarantee the collective and individual actions framed within the setting of primary health care.


26. Ministerio de Salud y Protección Social. Resolution 2626 [Internet]. Colombia: Sep. 27, 2019. Available at: https://www.minsalud.gov.co/Normatividad_Nuevo/Resoluci%C3%B3n%202626%20de%202019.pdf


44. Álvarez Sintes R. Clinical methods in Primary Health Care, social determinants and quaternary prevention. Rev haban cienc méd [Internet]. 2019 [cited on Apr. 8, 2020]; 18(5): 693-696. Available at: https://www.redalyc.org/journal/1804/180462341001/


46. Congreso. Law 91: por la cual se dictan disposiciones en material de responsabilidad deontológica para el ejercicio de la profesión de Enfermería en Colombia; se establece el régimen disciplinario correspondiente y se dictan otras disposiciones. Bogotá; Oct 5, 2004 [OJ. 45693].


