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Artigo de Revisão

## Community health and public health nursing: a systematic literature review

A enfermagem de saúde comunitária e de saúde pública: uma revisão sistemática de literatura

Enfermería en salud comunitaria y salud pública: una revisión sistemática de la literatura

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**Abstract.** Community health and public health nursing is a relevant issue in the context of the Portuguese National Health System reforms. International organizations, such as the World Health Organization, have emphasized the importance of nurses in community and public health care, and international studies report ongoing changes in this area in many countries. Through a Systematic Literature Review, conducted in early 2019, following an Equator Network protocol, Systematic Reviews, CRD's guidance for undertaking reviews in health care, prepared by York University, we addressed the research issue: what has been published about community health and public health nurse competencies and interventions. The inclusion of articles followed PRISMA 2009 and 36 of the total number of publications were selected. The contributions refer to the expansion of nurses' competences, events such as health fairs, nutrition, and caries assessments, performance in contexts of natural

disasters, development of management skills, understanding and influencing the making of public health policies. With the ongoing public health reform taking place in Portugal, it is also a good opportunity for nursing to investigate, produce, innovate, and recreate itself.

**Keywords:** nursing; nurse; community health; public health.

**Resumo.** A enfermagem de saúde comunitária e de saúde pública é um assunto relevante no contexto das reformas do Sistema Nacional de Saúde português. Organizações internacionais, como a Organização Mundial de Saúde, têm realçado a importância do enfermeiro nos cuidados de saúde comunitária e pública, e estudos internacionais referem mudanças em curso, nesta área, em muitos países. Através de uma Revisão Sistemática de Literatura, realizada no início de 2019, seguindo um protocolo do Equator Network, Systematic Reviews, *CRD's guidance for undertaking reviews in health care*, elaborado pela Universidade de York, debruçamo-nos sobre a questão de investigação: o que existe publicado sobre

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competências e intervenções do enfermeiro de saúde comunitária e de saúde pública. A inclusão dos artigos seguiu o PRISMA 2009, sendo que 36 do total das publicações foram selecionadas. Destacam-se os contributos referentes ao alargamento das competências do enfermeiro, realização de eventos, como feiras de saúde, rastreios de nutrição e cáries, atuações em contextos de desastres naturais, desenvolvimento de competências em gestão, em compreensão e influência na elaboração de políticas públicas de saúde. Estando em curso em Portugal a reforma da saúde pública, também é uma boa oportunidade para a enfermagem investigar, produzir, inovar e recriar-se.

**Descritores:** enfermagem; enfermeiro; saúde comunitária; saúde pública.

**Resumen.** La enfermería de salud pública y salud comunitaria es un tema relevante en el contexto de reformas del Sistema Nacional de Salud de Portugal. Organizaciones internacionales, como la Organización Mundial de Salud, han enfatizado la importancia de enfermeros en la atención comunitaria y de salud pública, y estudios internacionales informan cambios en curso en muchos países. A través de una Revisión Sistemática de Literatura, realizada a principios de 2019, de acuerdo con un protocolo del Equator Network, Systematic Reviews, *CRD's guidance for undertaking reviews in health care*, preparado por la Universidad de York, abordamos el tema de

When referring to community health and public health nursing we are using specific content concepts. Thus, for the College of Community

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investigación: qué se publicó sobre competencias e intervenciones de enfermería en salud comunitaria y salud pública. La inclusión de artículos siguió a PRISMA 2009 y se seleccionaron 36 del total de publicaciones. Se destacan las contribuciones que refieren la expansión de competencias de enfermeros, eventos como ferias de salud, nutrición y rastreos de caries, actuaciones en contextos de desastres naturales, desarrollo de habilidades de gestión, comprensión e influencia en la formulación de políticas públicas de salud. La reforma de salud pública que se está llevando a cabo en Portugal es una buena oportunidad para que la enfermería se investigue, produzca, innova y se recrea.

**Descritores:** enfermería; enfermero; salud comunitaria; salud pública.

## 1 Introduction

Community health and public health nursing is a relevant issue in the context of Portuguese National Health System reforms sustained by legislative changes, which will lead to reformulations and bring consequences to human resources, specifically to nurses specialized in the mentioned fields of action. This study presents a Systematic Literature Review (SLR) that intended to answer the question: what has been published on competences and interventions of community health and public health nurses, aiming to find written scientific evidence about nurses and nursing in community health and public health.

Nursing Specialty of the Order of Portuguese Nurses (OE)<sup>(1)</sup> public health is “the health state of a given group of people and governmental activities

and conditions, with a view to promotion, protection, or preservation of health” and

activities and conditions to promote, protect, or preserve their health.”

However, in the Regulation/OE nr 428/2018<sup>(2)</sup> the specific competences of nurses specialized in community nursing are performed in Community, Public and Family Nursing. But we do recognize that in anglophone articles<sup>(3)</sup> it is mostly public health nurses who promote community health with the competences attributed by OE to community health nurses<sup>(4)</sup>.

The World Health Organization (WHO), among other international agencies, highlights the importance of the presence and performance of public health nurses, and international publications mention that there are ongoing changes and innovations in this field in several countries. Even in Portugal, considered as a country with good public health organization regarding international standards, there has been a decline in this field according to recent public indicators. In the ambit of the mentioned reform of primary health care the valorization of human resources is relevant because they potentialize health gains. This was recently acknowledged by the current Portuguese Minister of Health at a conference on health sustainability when she advocated the investment in people, health promotion and prevention policies, together with investment in infrastructure and equipment for greater diagnostic and therapeutic capacity<sup>(5)</sup>. It is also important to place public health in perspective under the light of a sustainable future, because as

community health “refers to the health state of a community, as a specific group of people, and their

stated by the authors<sup>(6)</sup> it will not suffice to improve what is currently done. It is necessary to change the way of foreseeing public health priorities, imagining other ways of organizing our societies, activities, population gathering and, even, reformulating our behaviors.

Recently, the Order of Portuguese Nurses presented the Regulation nr 428/2018, published in *Diário da República*, 2<sup>a</sup> série, nr 135, July 16, 2018<sup>(2)</sup>, with the title: Regulation of Competences of Nurses Specialized in the area of Community Health and Public Health Nursing and in Family Health Nursing, to “provide a regulation framework for the certification of competences and inform citizens of what can be expected from these specialized professionals”.

But in Portugal there is a lack of knowledge about this nursing and this nurse, as we have confirmed through this recent SLR in the modality of Scoping Review dedicated to the subject<sup>(7)</sup>. However, there are international authors who have stood out on this theme, such as Wild & McGrath<sup>(8)</sup> or Linsley, Kane & Owen<sup>(9)</sup>, to mention some of the most recent.

It is relevant to stress that “evidence illustrate that innovations in the area of nursing, carried out by nurses, actually occur, somewhat all over the world, and nursing profession is affected by reality’s rapid evolution, marked by new informatics and communication tools, as well as by globalization. Innovation is present in nursing and it is increasingly evident in all fields of work through the

performance of nurses who include in their procedures the validated product of research and disseminate them in new publications and technologies”<sup>(10)</sup>.

In this study we have organized scientific knowledge found dispersed in a wide variety of publications; they represent advances in innovative processes of nursing work in this specific area, focusing in new approaches of community interventions by nurses. It may contribute to other similar research and discussions that may also offer new relevant contributions to community health and public health nursing.

## 2 Methods

We present this SLR conducted in January-February 2019 to revisit and update the state of the art in the ambit of the first author’s doctoral program, with the title “Competences and Interventions of Nurses Specialized in Community Health and Public Health: the case of a Public Health Unit in a Health Centers Grouping in the Lisbon Region”.

Drawing on texts selected through this SLR, our proposal was to conduct an essentially qualitative approach and analyze, among the published works, the best contributors to our theme. In this type of analysis, we do not intend to generalize outcomes, but rather identify the value of the particular, learn about the phenomenon in its complexity and deepness, as well as describe interventions in its context. The interest is situated in getting to know about the complex phenomenon in its complexity, because it may even not always make sense and also a way that the conclusions are defensible. But

besides establishing what is known about a

it may not always be possible to generalize it to other contexts and individuals, as highlighted by acknowledged authors<sup>(11-12)</sup>.

For this SLR we used the guidance of a protocol referred in Equator Network<sup>(13)</sup> according to the interest in responding to the following research question: “What has been published about competences and interventions of community health and public health nurses”. It has been included in the study prepared for the 8th Iberian-American Congress on Qualitative Research, with emphasis in the area of nursing<sup>(14)</sup>.

### 2.1 Protocol design

In this systematic literature review we follow one of the protocols indicated by Equator Network, Systematic Reviews, CRD’s guidance for undertaking reviews in health care, University of York (2009)<sup>(13)</sup>, which seemed suitable for the proposed objective that will be further presented. The manual highlights that the main objective of SLRs is to identify, evaluate and summarize the outcomes of all individual studies considered relevant, hence making all available evidence more accessible to decision-makers. When appropriate, the combination of outcomes of various studies offers a more precise estimate of the effectiveness of an intervention, rather than the research in one single study. Systematic reviews acquire a scientific character because they are based on explicit, pre-specified, and reproducible methods. Thus, when well conducted, these reviews provide trustworthy estimates about the effects of interventions in such

particular intervention, SLRs can also point to the lack of knowledge. And this may be especially important to guide future research<sup>(13)</sup>.

The methods followed in this review are those established in the protocol about the decisions to be made regarding the research, inclusion criteria, search strategy, selection of studies, data extraction, quality verification, data synthesis and report. Specifying methods in advance reduces risks of introducing deviation in the review. For instance, clarity on inclusion criteria avoids selecting studies according to the fact that the outcomes favor previously expected conclusion<sup>(13)</sup>. This will be further explained in this review.

The aim of this SLR is to find written scientific evidence about nurses and nursing in community health and public health, published in the last 10 (ten) years in journals specialized on this theme, following PICOS elements (Population, Interventions, Comparators, Outcomes, and Study design) adapted to SLR<sup>(14)</sup>. Thus, participants are the studies on community health and public health nursing; intervenient are the nurses; outcomes are all the studies that fulfil the inclusion criteria, found by searching the selected databases; and the type of studies are the scientific articles published in the last 10 years on the theme at issue<sup>(14)</sup>.

Our review has the following research question: what has been published on competences and

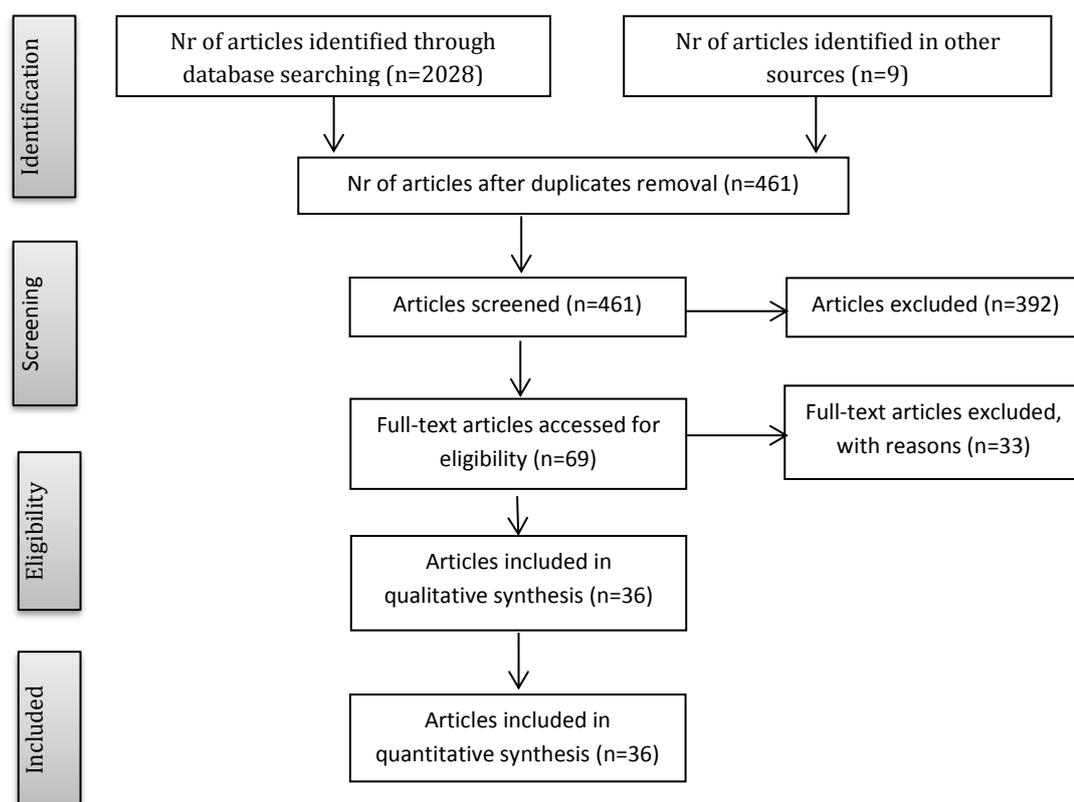
**Fig. 1.** PRISMA 2009 – Review steps.

interventions of community health and public health nurses. The inclusion criteria were: scientific articles published in the last 10 years; in the area of community health and public health nursing; focusing on competences and interventions of nurses; in Portuguese, English, Spanish, and French languages<sup>(14)</sup>.

The search strategy for the identification of articles used as fundamental resource the databases available at the virtual library of Universidade de Lisboa, Escola Superior de Enfermagem de Lisboa (UL-ESEL), namely: Pubmed, B-On, Scopus, EBSCOhost, ScienceDirect and Web Of Science (Medline). Descriptors used were, in Portuguese: *competências, intervenções, enfermeiro, saúde comunitária, saúde pública*; and in English: *competences, interventions, nurse, community health, public health*<sup>(14)</sup>.

## 2.2 Systematic literature review methodology

In the operationalization of the research, we used Boolean operators, OR and AND, in the following combinations: “*competências*” OR “*intervenções*” AND “*enfermeiro*” AND “*saúde comunitária*” OR “*saúde pública*”; “*competences*” OR “*interventions*” AND “*nurse*” AND “*community health*” OR “*public health*”. In the process of extraction, identification, selection, and choice of pertinent articles, we used the flow diagram of PRISMA 2009<sup>(15)</sup>, as shown in figure 1.



Source: Adapted from diagram: Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009) <sup>(15)</sup>. *Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement*. PLoS Med 6(6): e1000097<sup>(14)</sup>.

### 2.3 Methodology implementation

**Identification.** The number of articles identified in the searched databases as potentially relevant for our SLR was 2,037 articles. For the organization and treatment of the articles selected in our search we used the auxiliary working tool Mendeley, a software produced by Elsevier to manage and share research articles<sup>(14)</sup>.

**PubMed.** The first search using only descriptors resulted in 23.883 articles. Filters activated: Journal Article; Free full text; published in the last 10 years; Humans; Nursing journals; English; Portuguese; Subjects AIDS; Cancer; Systematic Reviews; Nursing journals, resulted in 162 documents. From this amount, only 120 were actually considered by

Mendeley for corresponding to full texts. From reading the titles and abstracts we obtained 10 articles with potential interest for this review. After reading the full texts there were 7 articles left to be included in the literature review for corresponding to the inclusion criteria<sup>(14)</sup>.

**B-on.** The first search, only with the above-mentioned descriptors, resulted in 21.617 articles. By using the filters: publication date (2008-2019); source types (academic journals, journals); subject (public health, *saúde pública*, *salud publica*, nursing, *enfermagem*), 7 articles resulted with potential interest for this review. From reading titles and abstracts, only 3 articles were considered, and

after reading the full texts, 2 articles were included in this review<sup>(14)</sup>.

Scopus. The initial search resulted in the total amount of 1.412 articles. After using the filters: Public Health Nursing; Journal Of Community Health Nursing; Journal Of Advanced Nursing; BMC Public Health; International Nursing Review; Canadian Journal Of Public Health; 2019-2010; ar; NURS; HEAL; English; Spanish; French; Portuguese, there was a result of 97 documents, and from reading titles and abstracts we obtained 24 articles with potential interest for this review. From reading the full texts, we concluded that the 24 articles were of interest to our literature review<sup>(14)</sup>.

EBSCOhost. On this database, besides the descriptors, we used the filters: Academic Journals; Magazines; public health; nursing; nurses; epidemiology; health promotion; health; Spanish; Portuguese; English, and as a result we obtained 318 texts. From this amount, only 160 were actually considered by Mendeley for corresponding to full texts. From reading the titles and abstracts the result was 15 articles with potential interest for this review. From reading the full texts, we obtained only 2 that complied with the inclusion criteria of this review<sup>(14)</sup>.

ScienceDirect. With the initially proposed descriptors we had the total amount of 317,547 documents. Filters applied were: 2008-2019; review articles (8); research articles (69); data articles discussion; Public Health (77); open access (77). From this we obtained 77 results. From this total,

only 25 were actually considered by Mendeley for corresponding to full texts. From reading titles and abstracts we obtained 5 articles with potential interest for this review. After reading the full texts there was no article to be selected<sup>(14)</sup>. Web Of Science (Medline). Using the descriptors, the database retrieved 603 articles. Refined by the filters MeSH: public health; prevention control; epidemiology; journal article; research support; comparative study; English abstract; evaluation studies; review, 52 articles were selected. From this amount only 43 were considered by Mendeley for corresponding to full texts. From reading titles and abstracts we obtained 3 articles with potential interest for this review. After reading these full texts none of them was selected due to no compliance with the inclusion criteria<sup>(14)</sup>.

Other sources. From the Portuguese Journal of Public Health we extracted 9 texts with potential interest. After reading the full texts only 1 complied with the inclusion criteria of this review and was selected as eligible<sup>(14)</sup>.

Selection. In summary, after reading titles and abstracts of 461 texts, only 69 were selected for the next phase of screening for eligibility to this SLR. In this phase 392 texts were excluded due to no compliance with the inclusion criteria. From reading the 69 selected full texts, 36 texts were considered relevant and complying with the inclusion criteria of this research and were selected for the next phase of data extraction<sup>(14)</sup>. The full process is represented in figure 2.

**Fig. 2.** Data related to the process of search and retrieval of articles on the electronic databases and other sources, and respective final result<sup>(14)</sup>.

DATABASES	Nr Identified	Mendeley	Eligible	Included
Pubmed	162	120	10	7
B-On	7	7	3	2
SCOPUS	1412	97	24	24
EBSCOhost	318	160	15	2
ScienceDirect	77	25	5	0
WebofScience-Medline	52	43	3	0
Other sources: PJPB	9	9	9	1
<b>TOTAL</b>	<b>2037</b>	<b>461</b>	<b>69</b>	<b>36</b>

### 3 Results

Data extraction. From the full reading of the articles selected for this SLR we highlighted the pertinent and most relevant data for the response to our previously identified question. In order to facilitate the reading of all the texts as a whole and retrieve the most relevant data for its identification and clear individualization, we built a table containing 7 columns: author(s); year/country; journal/database; for the qualitative analysis; they originated the columns of results and relevance for this SLR.

At the second phase, drawing on the same table, we highlighted the key words in each of the two columns just mentioned, which served, on the one hand, to ensure that the texts complied with the objectives established for this review, and on the other hand, to guide us through the analyses that will be presented in the next session.

For the translation of foreign language texts (Spanish and English) we used our own resources.

#### 3.1 Qualitative analysis

The 36 selected articles are written in 3 languages, with predominance of English with 28 articles, followed by Portuguese with 7, and 1 in Spanish. By countries, the USA are present with 16 articles; Portugal, Brazil, and Israel with 3 articles each; and

title/key words; objectives; results; and relevance<sup>(14)</sup>. The result was an extensive table with 36 rows, one per article, synthetizing only the most relevant data for our purpose.

This table enabled us to organize the analysis of the texts as to obtain the most pertinent content to perform the qualitative and quantitative analyses. Two fields, in particular, provided most of the data Angola, Vietnam, Scotland/UK, South Africa, Finland, Taiwan, Ireland/Norway, Japan, Colombia, Turkey, and Canada with 1 article each. We may therefore consider that we obtained a varied and universal representation<sup>(14)</sup>.

Having done the full reading of all the 36 articles selected for this SLR according to the relevance regarding the research question and predefined inclusion criteria, namely: last 10 years; community health and public health nursing area; focus on nurses' competences and interventions; Portuguese, English, Spanish, and French languages; we then proceeded to the analysis of the texts. Our line of analysis articulates titles, subjects, results, and relevance of these scientific works, and highlights year of publication and country; hence, we created 4 groups<sup>(14)</sup>.

3.1.1 The 7 articles entitled: 1- Attention foci in community health nursing and community empowerment: a qualitative study<sup>(16)</sup>; 2- Health diagnosis: a responsibility of community health nursing in Angola<sup>(17)</sup>; 3- The Impact of Nurses on Neglected Tropical Disease Management<sup>(18)</sup>; 4- Nurse leadership: intervening element in the relationships network of the community health care agent<sup>(19)</sup>; 5- Daily practice of community health agents: difficulties and limitations of care<sup>(20)</sup>; 6- Public Health Nursing Competency Instrument: Scale Reduction and Reliability of Factors<sup>(21)</sup>; 7- Barriers and Facilitators in the Delivery of Environmental Risk Reduction by Public Health Nurses in the Home Setting<sup>(22)</sup>, have in common between them themes related to descriptors competence, intervention, nurse, community health and public health<sup>(14)</sup>. Stand out:

3.1.1.1 competences – build community capacity; respond to the need of individuals, groups, and communities; promote interlocution and act as teamwork facilitator; strengthen relationships between users and other members; delivery of integrated services; evaluate strong points and challenge areas; improve families' and communities' health<sup>(14)</sup>;

3.1.1.2 intervention – in the community as a care unity (community empowerment / community participation / community process / community leadership); actual diagnosis of a community's health; act as teamwork facilitator in community health promotion; facilitator who articulates relationships between users and team members; direct interventions, or preparing others to perform

better diagnosis and treatments; use the tool Intervention Wheel; capability to reduce environmental risk in domestic setting<sup>(14)</sup>.

3.1.2 The 19 articles entitled: 1- Community health needs assessment: a nurses' global health project in Vietnam<sup>(23)</sup>; 2- A Collaborative Communitywide Health Fair: The Process and Impacts on the Community<sup>(24)</sup>; 3- The Affordable Care Act: Primary Care and the Doctor of Nursing Practice Nurse<sup>(25)</sup>; 4- Compulsive Hoarding: Overview and Implications for Community Health Nurses<sup>(26)</sup>; 5- The effectiveness of the Omaha System intervention on the women's health promotion lifestyle profile and quality of life<sup>(27)</sup>; 6- Case management educational intervention with public health nurses: cluster randomized controlled trial<sup>(28)</sup>; 7- Identifying attitudes, beliefs and reported practices of nurses and doctors as immunization providers<sup>(29)</sup>; 8- Theory of the response to the item in research in public health<sup>(30)</sup>; 9- Public health nurses' activities at a time of specialization in nursing - a national study<sup>(31)</sup>; 10- Caries risk assessment tool and prevention protocol for public health nurses in mother and child health centers, Israel<sup>(32)</sup>; 11- Public Health Nurses in Israel: A Case Study on a Quality Improvement Project of Nurse's Work Life<sup>(33)</sup>; 12- Public Health Nursing Activities: Visible or Invisible?<sup>(33)</sup>; 13- Risk-Reduction Strategies to Expand Radon Care Planning with Vulnerable Groups<sup>(35)</sup>; 14- A Systematic Method to Document Population-Level Nursing Interventions in an Electronic Health System<sup>(36)</sup>; 15- A Public Health Nursing Research Agenda<sup>(37)</sup>; 16- Description of public health nursing nutrition assessment and

interventions for home-visited women<sup>(38)</sup>; 17- A falls case summary: application of the public health nursing intervention wheel<sup>(39)</sup>; 18- Identifying Residents' Health Issues Six Weeks after the Great East Japan Earthquake<sup>(40)</sup>; 19- We Stop for No Storm: Coping with an Environmental Disaster and Public Health Research<sup>(41)</sup>, focus on interventions<sup>(14)</sup>.

Thus, there are the following highlights: improvement of health centers' functions; health fairs coordination; Doctor of Nursing practice; cases search, dissemination, and management; organize, document, and evaluate results of comprehensive care; academic and clinic nurses in the nurses' preparation strategy; vaccines administration; public health research tools; interventions at individual level versus population level; oral health prevention services; interventions in nurses' quality of life so that they can deliver high quality services to clients; individual, family, and community levels of intervention and at a systematic level of secondary and tertiary prevention; risks reduction and raise of awareness; interventions derived from Intervention Wheel and incorporated in the Omaha taxonomy system; interventions based on population and health improvement; nutrition intervention; falls prevention and management; early intervention in catastrophes; proactive planning<sup>(14)</sup>.

3.1.3 The 9 articles entitled: 1- Professional role identity in shaping community nurses' reactions to nursing policy<sup>(42)</sup>; 2- *Imagarios de la educación en salud pública en enfermería*<sup>(43)</sup>; 3- Development of a new graduate public health nurse residency

program using the core competencies of public health nursing<sup>(44)</sup>; 4- Credentialing Public Health Nurses: Current Issues and Next Steps Forward<sup>(45)</sup>; 5- Linking public health nursing competencies and service-learning in a global setting<sup>(46)</sup>; 6- Political Astuteness of Baccalaureate Nursing Students Following an Active Learning Experience in Health Policy<sup>(47)</sup>; 7- Vaccination Competence of Public Health Nurses<sup>(48)</sup>; 8- The Skills Gap in Nursing Management in the South African Public Health Sector<sup>(49)</sup>; 9- *Papéis profissionais de médicos e enfermeiros em Portugal: limites normativos à mudança*<sup>(50)</sup>, focus essentially on competences<sup>(14)</sup>.

Highlights: ability to adapt; develop specific competences for future nurses; increase support and intentional learning in public health; seek credentialing; develop competences in public health at a practical level; public policies learning; competences to achieve desired results in vaccination; control, lead, organize, and perform self-management; increase nurses' competences<sup>(14)</sup>.

3.1.4 Finally, the article: Competencies of general care nurses in primary care: from understanding to implementation<sup>(51)</sup>, focuses exclusively on competencies, concluding that these are better understood than implemented<sup>(14)</sup>.

From this summary of articles and themes we underline that competencies and interventions in community and public health are often referred to, although there is a large group of articles that focus mainly on interventions, which are varied and quite different from and challenging for our reality. To be highlighted are cases such as "Doctor of Nursing Practice" (DNP)<sup>(25)</sup>, a special nurse's qualification

to be a leader in community health centers, a member of multidisciplinary teams, and stimulator and responsible for taking initiatives in future policies<sup>(14)</sup>. It is inserted in the ambit of the 2010 Patient Protection and Affordable Care Act (ACA), which initiated the transformation of the USA health system. The authors<sup>(25)</sup> recognize, though, that there are still professional and legal barriers to be removed before the DNP nurses are able to deliver the care for which they have been prepared.

But there are also cases in which nurses seem to assume a more significant role in the diagnosis of communities' and populations' health. This is the case of nurses in Angola, where health planning is considered a crucial tool for the enhancement of community health through the development of intervention strategies, drawing on knowledge of an actual community's health reality. The novelty here is that this knowledge is supposed to be achieved

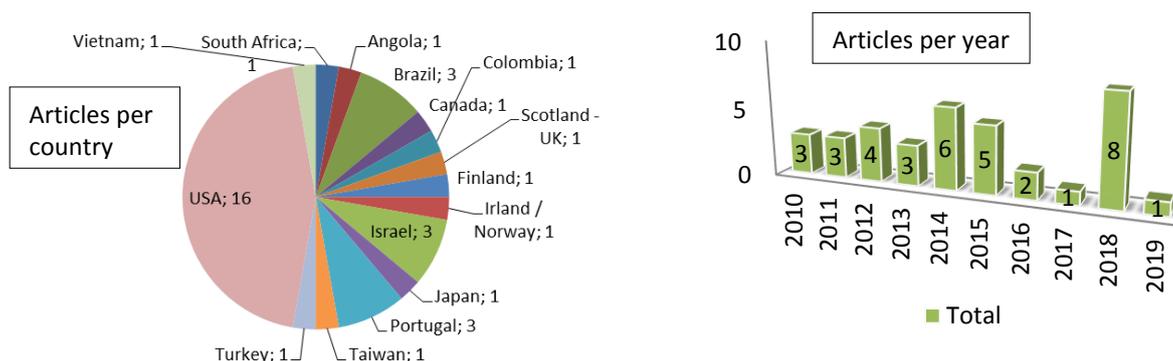
with the elaboration of the diagnosis by a nurse specialized in community health<sup>(17)</sup>.

We also present the case of Vietnam, where an experience in partnership resulted in a useful tool for the compilation of data on the community's health needs and for the preparation of health services to fulfil the requirements and capacitation of the communities. It was seen as a crucial process for nurses who start global health projects in other countries with limited resources, and for the production of evidence on practice, research, and policies, assuming the responsibility for the promotion of objectives that are inherent to sustainable development<sup>(23)</sup>.

### 3.2 Quantitative analysis

Figure 3 presents a graphic distribution of publications by country of origin and year of publication.

**Fig. 3.** Graphic presentation of the number of articles selected for the SLR, by country of origin and year of publication<sup>(14)</sup>.



As observed from the graphics in figure 3, there is a predominance of articles published in the United States of America (USA) and the year 2018 presents the highest number of publications among those selected for our review. For the first aspect, the Rev. Gestão & Saúde (Brasília) Vol. 11, n. 02, Maio-Agosto. 2020. p 80-96

explanation may come from the fact that the USA is a large country in terms of territorial extension and population, but also due to the development of nursing both as a discipline and as a profession. Regarding the highest number of publications

occurring in 2018, we have found no particular explanation but we register the fact, which many indicate that it was a positive year for nursing researches, even if we cannot prove it, since this SLR had inclusion and exclusion criteria that may invalidate this assumption.

#### 4 Discussion

The SLR has shown that there are relevant works on the research question and this configures a significant evidence contribution. However, not all studies and results reflect the same advance in nursing discipline and practice. The article on the activity of public health nurses in the time of nursing specialization, a national study carried out in Israel<sup>(31)</sup>, refers that one of the key results is that the main engagement of public health nurses focuses on vaccination, guidance to young mothers, and follow-up of children 0-2 years of age. Also, that most of the service is delivered at an individual level and not at community level<sup>(14)</sup>.

In its turn, a Portuguese study on attention foci in community nursing<sup>(16)</sup> concluded that nurses see the community as a client through a central focus, the community management, with 3 dimensions of diagnosis: participation, leadership, and the community process, bound to the concepts of the community nursing model. However, the study stresses the fact that it regards a reduced group of nurses in a region of northern Portugal<sup>(14)</sup>.

The study on the visibility or invisibility of public health nursing<sup>(34)</sup> concluded that nurses are involved in many activities to prevent diseases and contribute to the population's health. However, their activities

are not always visible to the public and policy deciders<sup>(14)</sup>.

In its turn, a study conducted in Vietnam on the analysis of community's health needs underlines that the majority of people used the Community Health Centers (CHCs) as basic health units and revealed a high degree of satisfaction regarding the services currently delivered. However, there was the need that the health centers deliver broader services including those for chronic diseases and that health workers should improve their competences. Community leaders manifested their interest in having information on health for chronic diseases and a strong commitment to be involved in their communities' health activities. The results suggest future interventions for the improvement of CHCs' functions, human resources, and residents' selfcare ability<sup>(23)</sup>.

The study on the assessment by public health nurses on nutrition needs and interventions for home-visited women highlights that these women are able to improve their nutrition at home by using the KBS model (Knowledge, Behavior, Status). Results also point to the opportunity that home-visited women improve their nutrition through the multiple interventions of nurses. But they also point to the possibility of improving the care of home-visited clients by providing more nutrition intervention, particularly to those who do not yet benefit from it, as well as revising the standards of care plans in order to reflect significant changes in the type of nutrition interventions, highly relevant to the management of cases<sup>(38)</sup>.

Thus, considering the two dimensions of community health and public health, and returning to the article on Israel<sup>(31)</sup>, there seems to emerge the issue of the need to have a different model of community health services, one that implements collaboration and finds common denominators between physicians, nurses, social workers, and others, as to adequately correspond to the system's and its clients' needs<sup>(14)</sup>.

When observing the Portuguese example of a professionals' team of a Public Health Unit (PHU) within a Health Centers Grouping, which is the aggregative unity of primary health care of the National Health Service (SNS), there emerges the nurse with competences to be part of and assume most of PHU activities. However, the World Health Organization (WHO)<sup>(52)</sup> report entitled "Health System Review, Portugal", though stating that nurses belong to the group comprising the highest number of health workers, stresses that it is a low number when compared to international rates<sup>(14)</sup>.

Therefore, it is necessary to produce changes so that chronic diseases may in fact be followed-up in real-life contexts. From the same report we extract challenges related to human resources, such as the need of decentralization in regard to the implementation of other policies, stressing that health is too much centered on medical services, even though other intervenient present significative changes in their capacities<sup>(14,52)</sup>. Hence, it is preconized that for the implementation of public health policies there should be investments in human resources development, in order not to stay only at the level of strategic plans. In this regard it

is important to highlight the discussion on the broadening of nurses' role in Portugal<sup>(14,50)</sup>.

One of the ways may pass through the dissemination of nurses governance models, which is important for their recognition, by enhancing their capacities in the coordination and implementation of national and local levels programs for greater achievements in health gains, for instance those related to children and vaccination, thus placing Portugal among the European countries with better results in this area<sup>(53)</sup>, and by stimulating multi-local research that may highlight the best interventions of public health nurses<sup>(14,54)</sup>.

We consider that these are significant contributions to the advancement of nursing science insofar as by promoting reflection on the theme it will problematize and trigger other researches and deepen debates and discussions among researchers on community health and public health nursing.

## 5 Conclusion

From the systematic literature review conducted we have extracted fundamental contributions to shed light on the research question, regarding the variety and specificity of nursing competences and interventions in community health and public health, which translate into benefits for communities and populations in health promotion and prevention of diseases. Beyond the diversity of situations and contexts identified in the articles presented and in the actual interventions illustrated here, we highlight the innovative dimensions considering the benefits offered to community health and public health nurses; and the contributions to nursing science that are expressed

in various forms and different contexts, new and renewed interventions that imply health gains in the benefit of community and individuals.

One fact that draw our attention in an article identified in this literature review was the statement that most public health nurses work mainly in vaccination. This reality, however, seems to be changing, considering all evidence found and the discussion around the broadening of nurses' competences.

We refer to nurses conducting planning, guidance and "health fairs" specifically directed to needy populations; others conducting nutrition intervention tracking, interventions in neglected tropical diseases in the USA, caries prevention in Israel, and even performing in contexts of natural disasters, in Japan or the USA. But also to the discussion in South Africa concerning the lack of competences in public health management, in the design of future nurses education programs in this area, and even the capacitation for better understanding and influencing the elaboration of public health policies.

Considered worthy of deepening, in face of the innovative character, singularity, and future implications, are cases like the "Doctor of Nursing Practice Nurse" for the competences and interventions implied, as well as the debate in Portugal on the role performed by physicians and nurses due to regulatory issues, resistance to changes, and even the possibility of extending to nurses certain functions up to now restricted to physicians.

We understand that evidence gathered in this review represent a significant arsenal of contributions to the nursing scientific field for being capable of influencing new forms of regarding the discipline, research, and education, which will conduct to practice, mobilizing new interventions of community health and public health nurses.

A possible limitation of this review is the fact of not being open to all languages, for instance German or Russian, not only because of the practical inability to understand it, but also for the limited number of available databases. The time interval chosen may be seen as a limitation, though it was a conscious choice opting for a relatively recent period but sufficiently significant.

In Portugal there is an ongoing public health reform, which makes it a good opportunity for nursing to research, produce, innovate, and recreate itself. As acknowledged and pointed by the European Union, investing in research and innovation is always investing in the future of all science.

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