OCCUPATIONAL RISKS IN THE WORK PROCESS OF THE COMMUNITY **HEALTH AGENT: INTEGRATED REVIEW**

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ABSTRACT

Objective: To identify, in the scientific literature, publications on the main occupational risks in the work of the Community Health Agent (ACS). Method: Qualitative research of the type integrative literature review, having as guiding question: What are the risks that the ACS are exposed in their work activity? Data collection took place in May 2019, in the Latin American and Caribbean Literature in Health Sciences (LILACS) and Scientific Electronic Library Online (SciELO) databases, through the Virtual Health Library (VHL) portal, the main collection of the Web of Science, through the Portal of Periodicals of Capes. Results: We identified 43 publications that, after filtering according to inclusion and exclusion criteria, rusulted in a sample of 12 articles. Four types of risk were identified, presented in the categories of analysis categories, namely: Physical risks; Chemical risks; Biological risks; Psychosocial risks. Conclusions: Ğiven the importance of the ACS to the Family Health Strategy and public health, it is important to reflect on the working conditions in which these professionals are and its hoped that managers and the ACS and other professionals are expected to mobilize to structure mechanisms of support and defense of this category, minimizing and eliminating occupational risks.

Keywords: Community health workers. Occupational health. Occupational risks. Nursing.

INTRODUCTION

The field of Occupational Health can be understood as a theoretical-practical perspective Collective Health of the area. based fundamentally on the relationship between the health-disease process and work activities⁽¹⁾. Currently, the strategies and guidelines for comprehensive worker care are defined in a national public policy, whose surveillance, health promotion and reduction of morbidity and mortality are the main guidelines⁽²⁾.

Thus, workers' health actions indispensable for the maintenance of functional capacity; however, some professional categories are still little remembered in the construction of such activities, such as Community Health Agents (ACS). The ACS performs a primary function, acting in diverse activities in the technical and political area. Their contribution to the organizational flow of services is great. In addition, they participates directly in actions related to the community aspect. They carry out many practices in the promotion, protection and recovery of health and in the prevention of injuries, including those from labor processes. Thus, ACS provides to population better access to health services in the Family Health Strategy $(ESF)^{(3,4)}$.

ACS's self-perception about his/her quality of life can be considered indefinite, since research indicates extremely divergent results, ranging from extreme satisfaction to generalized dissatisfaction. However, some situations stand out in the work process and are seen as negative influencing factors, such as financial resources, the workplace environment, and also external activities and physical security weakened by urban violence (5,6).

Regarding structural difficulties the type of work, it is necessary to consider the impact of daily situations on the health of the ACS, such as: the need to walk long distances, exposure to heat and sun for home visits, living and operating in risky areas and unhealthy places, situations of family violence, difficulties in the

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implementation of actions and data collection due to illiteracy and the low level of education of users at the moment of attendance, among others⁽⁷⁻⁹⁾. In addition, the precarious working conditions, especially the low remuneration, devaluation of the activity and deviations of roles are present in the daily life of the ACS, even after the formalization of the profession and the establishment of the salary wage ⁽¹⁰⁾. Such situations can be sources of suffering and illness for this worker.

It is also worth mentioning that the role of the ACS has undergone intense changes in recent years. From the issuing of the changes in the National Policy of Primary Care, ACS may also be responsible for technical activities in which they do not have adequate qualification, such as making dressing, blood pressure measurement and even indication of hospitalization⁽¹¹⁾.

Combining the high number of actions carried out by the ACS within the scope of the ESF, the possibility of exposure to occupational risks, whether arising from the work process or the work environment, is undeniable. Therefore, the concept of risk is highlighted as any situation that, by any circumstance, increases the possibility of an undesired factor, such as an accident, an illness or a health problem⁽¹²⁾.

Therefore, the objective of this article is to identify, in the scientific literature, publications on the main occupational risks in the work of the Community Health Agent and, for this, it was outlined as a research question: What are the risks that the Community Health Agents are exposed to in their work?

Although the analysis of risks and illnesses aimed at ESF professionals has been an extremely discussed topic in the last 10 years, there is a shortage of studies directed specifically to ACSs. Therefore, this work is justified by the presentation of potential risk/discomfort situations. In addition, it is a stimulus to the creation of future intervention plans for such situations, impacting consequently on the health-disease process and the quality of life at work.

METHODOLOGY

This is a qualitative research, of integrative literature review (ILR) type about the

occupational risks of the ACS work. This is a technique of mapping the literature in a given area of research, in which the researcher is allowed to have a comprehensive view of what is published in a given domain⁽¹³⁾.

As a guideline of this research, the strategy called Population, Phenomenon of Interest and Context (PICo)⁽¹⁴⁾ was used. In this review, Population (P) regarded community health agents; the Phenomenon of Interest (I), the risks, and the Context (Co) referred to the labor process.

Thus, as a first step of ILR, the question of research was constructed, based on the aforementioned strategy: What are the risks that the Community Health Agents are exposed in their work activity?

In the second stage of ILR⁽¹³⁾, inclusion criteria were established: 1. Publications in the article format; 2. Publications in Portuguese, English or Spanish; 3. Full-text publications available online. The selection of articles did not make any temporal delimitation and occurred by reading titles and abstracts. As exclusion criteria, the following were outlined: 1. Publications that did not answer the guiding question; 2. Duplicate publications; 3.Publications of the type revisions of literature on the same theme.

In the third stage of ILR⁽¹³⁾, the information to be collected was defined in order to favor the categorization of the studies and, for this purpose, an instrument was used with the following variables: title, year, country of origin, database, objective, prevalent themes and category of analysis.

In the fourth stage of ILR⁽¹³⁾, data collection was carried out at the scientific bases. The search was updated in May 2019 by two independent evaluators, in the following databases: Latin American and Caribbean Literature in Health Sciences (LILACS) and Scientific Electronic Library Online (SciELO), through the portal of the Virtual Library in Health (BVS), the main collection of the Web of Science, through the Portal of Periodicals of Capes. The choice of these databases was based on the academic-scientific relevance.

For the search, the descriptors in Health (DeCs in Boolean sentence format, as follow: ((agentes comunitários de saúde) AND "riscos ocupacionais") and agentes comunitários de

salud) AND "riesgos ocupacionales") were used. In addition, the search for the corresponding terms in the Medical Subject Headings was also used, creating the Boolean phrase ("Community

Health Workers" AND "Occupational Exposure"). The flowchart with the eligibility representation and inclusion of articles in the selection of studies is shown in Figure 1.

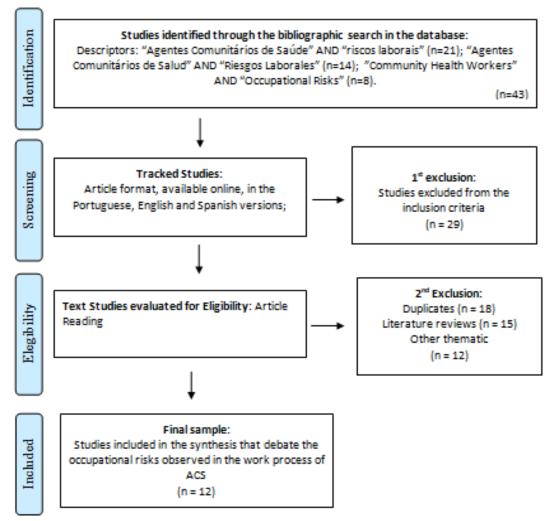


Figure 1. Flowchart with eligibility representation and inclusion of articles in the selection of studies **Source:** The authors

In the fifth stage⁽¹³⁾, the studies were analyzed descriptively and interpretatively; the ethical aspects and the authorship of the ideas, the concepts and the definitions decided by the authors were considered. The selection of the relevant studies was done by incorporating the inclusion and exclusion criteria in the first search result, followed by the reading of the titles and abstracts and, subsequently, the publication as a whole.

The sixth stage of ILR⁽¹³⁾ is the presentation of this review in a synoptic table format to synthesize the most relevant findings. The variables selected to compose the table were the

same as those used in step three of ILR, to mention: title, year, country of origin, database, objective and prevailing themes.

RESULTS AND DISCUSSION

There were 43 publications. In the first stage of exclusion, only the manuscripts that met the inclusion criteria, whose sample consisted of 29 articles, were considered. In the second stage of exclusion, duplicate articles, articles of literature review and of other subject were discarded and, at this moment, the final sample of 12 articles was reached, as described in Table 1.

Table 1. Selected articles in the study.

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Title, year, country and database	Objective	Prevailing themes	
Workloads and strain process in Community Health Agents (2016, Brazil, LILACS) ⁽⁸⁾	To identify the workloads present in the work activity of the community health agents (ACS) and the resulting strain processes.	Biological load Physical charges Chemical loads Mechanical loads Physiological loads Psychic charges	
Occupational risks and injuries: perceptions of community health agents (2015, Brazil, BDENF) ⁽¹⁵⁾	To describe the perception of community health agents about risks and injuries related to their occupational activities.	Exposure to violence in the areas that carry out activities Geographical characteristics in the areas of activity Exposure to climatic conditions without adequate protection Exposure to infectious diseases Exposure to animal attacks Excessive working hours They develop other activities without training Inadequacy and lack of materials to develop activities	
Prevalence and factors associated with <i>Mycobacterium tuberculosis</i> infection among community health agents in Brazil using tuberculin skin test (2015, Brazil, LILACS) (16)	To determine the prevalence and factors associated with latent Mycobacterium tuberculosis infection among community health agents (ACS), using two cutoff points of the 5mm and 10mm tuberculin test.	Access to ineffective personal protective equipment (PPE) Contact with a person with tuberculosis in the household Have received training on tuberculosis in the last two years Deficiency in the training of ACSs on tuberculosis	
Relationship between voice and work disorder in a group of Community Health Agents (2013, Brazil, LILACS) (17)	To analyze the relationship between voice and work disorder in a group of Community Health Agents (ACS).	Exposure to dust and smoke Low water intake Develop support activities within the unit Work overload Accumulation of functions Overloaded workday Exposed to climatic conditions and intense physical exertion Inadequate working conditions Presence of stress factors in work activities Exposure to violence (identification of cases of intrafamily violence, local violence, violence at work)	
Violence related to the work of family health teams (2013, Brazil, BDENF) (18)	To describe violence related to the work of the Family Health teams of Uberlândia, MG.	ACS workers suffer verbal violence, discrimination and sexual harassment Workers have feelings such as sadness, anger, humiliation, with consequent loss of job satisfaction Risk factors due to violence at work: lack of training to deal with situations of violence and work overload	
Prevalence of minor psychiatric disorders in primary health care workers in the South and Northeast regions of Brazil (2012, Brazil, SciELO) (19)	To evaluate the prevalence of minor psychiatric disorders and associated factors in primary health care workers in the South and Northeast Regions of Brazil.	Precarious work regime Dissatisfaction with the physical structure High prevalence of minor psychiatric disorders being the ACS with the highest index	
Perceptions of work stress by community health agents (2011, Brazil, LILACS) (20)	To identify the occupational stress factors referred by ACS and to analyze their relation with possible health effects, according to their own perceptions.	Low recognition of their work Devaluation of work Work overload: productivity gains by goals, intense pace and short work periods without adequate conditions Function desviation Reduction of the quality of services by the demotivation lived in the work environment in fulfillment of goals and to attach statistical data for ESF Stress load due to fear of violence experienced in the different environments during their daily work Neglect with their own health	

Title, year, country and database	Objective	Prevailing themes
Risk of tuberculosis infection in community health agents (2010, Brazil, LILACS) (21)	To estimate the risk of tuberculosis infection in community health agents involved in the control of the disease.	Previous exposure to tuberculosis Contact with tuberculosis in the workplace Use of protective measures against cases of tuberculosis
Perception of risk in family health work: a study with workers in the South of Brazil (2009, Brazil, LILACS) (22)	To identify the perception of workers in the Family Health Strategy about the risks they are exposed to at work	Socio-environmental characteristics of the territory: electric fences, dogs, horses and poisonning animals Acquire any disease due to exposure to infectious and parasitic agents Physical and organizational conditions of the basic health unit Linking the professional with families in precarious situations in the community Collection of productivity and the pace of work by the management Non-work resolution Exposure to physical and moral violence in relationships with team professionals/or population
Mycobacterium tuberculosis infection among community health agents working in TB control (2009, Brazil, LILACS) (23)	To evaluate the incidence of Mycobacterium tuberculosis infection through tuberculin skin test in community health agents (ACS) who follow-up patients on TB treatment in the city of Cachoeiro de Itapemirim (ES).	Low knowledge about tuberculosis Follow-up of contaminated patients Lack of personal protective equipment Inappropriate physical environment
Evaluation of the quality of life of the community health agents of Lagoa Santa - MG (2008, Brazil, LILACS) (24)	Assess the quality of life of the city's ACSs of Lagoa Santa/MG.	Lack of recognition of work performed Need to adapt to digital tools
Risk assessment in the work of community health agents: a participatory process (2008, Brazil, BDENF) (25)	To describe and analyze the methodological process of developing an instrument for risk assessment in the work of community health agents.	Unavailability of PPE for home visits Exposure to sunlight, moisture Work overload and performance of other functions to meet population demand Development of health problems

Source: The authors

It was observed that all the topics were published after 2008. In addition, 50% of the articles^(8,15-19) were published after the promulgation of the national policy for the protection of workers⁽²⁾.

The articles were organized and analyzed for their thematic elements evidenced in their results and discussions. The risk classification proposed by the Ministry of Health was used to categorize these themes⁽²⁶⁾. In this sense, the following categories emerged: Category 1 - Physical risks; Category 2 - Chemical risks; Category 3 - Biological risks; Category 4 - Psychosocial risks.

Physical risks are any form of energy, perceptible or not, that can affect, temporarily or permanently, the health of the worker. In health, the most common physical risks are: constant

noise, temperature variations and ionizing and non-ionizing radiation⁽²⁶⁾. In the present research, it was observed that three articles indicated the presence of physical risks in the ACS work^(8,15,25).

The daily work of the ACS includes the home visits and the recognition of territories; thus, exposure to solar radiation is the main physical risk of this worker^(8,15). In a survey carried out in southeastern Brazil, it was observed that 92% of the community health agents spent more than 6h daily exposed to solar radiation; of these, 95% use sunscreen regularly⁽²⁷⁾.

In addition to exposure to solar radiation, exposure to moisture was detected as a physical risk⁽²⁵⁾. This situation was evidenced in the labor process of agents working near rivers or after seasonal periods of rain.

Chemical risks refer to the worker's exposure to any substance, which, from a respiratory or other contact, can attack the human body and cause health damage⁽²⁶⁾. In this research, it was observed that two publications pointed out the presence of chemical risks in the work of ACS^(8,17).

From the perspective of chemical risks, the main observed situation was the exposure to dust from public roads, often without adequate pavement, which can lead to allergic and respiratory problems^(8,17). It is worth noting that, unlike the physical risk observed in this research, which can be attenuated by the worker with the use of sunscreen, hats and other devices as possible personal protective equipment (PPE), it is not possible to determine or stimulate the use of any PPE for exposure to the chemical risk found.

Biological risk is understood to mean any situation in which the worker is exposed to bacteria, fungi, viruses or any other microorganism capable of causing illness and health problems, whether temporary or permanent⁽²⁶⁾. In this sense, we observed the presence of biological risks in the labor process of the ACS in 50% of the articles studied in this research^(8,15,16,21-23).

Biological risk can be considered the most prevalent among health workers and, for mitigation, it is necessary to share responsibility between professionals - through good biosecurity practices - and managers - through the adequate and permanent qualification of workers⁽²⁸⁾.

In the present analysis, two possible exposure situations was observed. The first corresponds to exposure to a pathogen through contact with users contaminated by some type of infectious agent^(8,15,16,21-23). It should be pointed out that the concern with tuberculosis contamination was the most cited, which corroborates recent data in the literature, since it is possible to say that primary care professionals have a high prevalence of latent tuberculosis infection. In this sense, this should be a frequent theme in continuing education actions for all professionals, especially for ACSs⁽²⁹⁾.

The second exposure situation is due to the possibility of biting domestic and venomous animals^(8,22), which can lead to exposure to

various pathogens. In this sense, the national scientific literature points out that accidents with biological exposures of this nature may have a prevalence of 80% among ACS⁽³⁰⁾.

Psychosocial risks are observed through the presence of work situations that generate emotional or psychological consequences of a temporary or permanent nature, and are often associated with work processes⁽²⁶⁾. In this research, 75% of the articles analyzed point to the presence of psychosocial risks in the work of ACS^(8,17-20,22,24,25).

Thus, these risks show that the internal and external working conditions of the health units expose the ACS to the risks of compromising the physical integrity and also to the psychological suffering. In this sense, the lack of valorization of the professional⁽²⁰⁾, the performance of functions outside their scope of work^(8,17,25), the need to adapt to the use of digital tools⁽²⁴⁾, the exaggerated pressure for productivity, intense work rhythms^(15,22) and exposure to situations of violence^(18,19) are emphasized.

Primary health care professionals suffer from work overload and relate the fact to the model of care that is currently installed in basic health units. There is a sharp increase in demand, increasing the number of people served and registered. This number does not match the number of professionals, inputs required for service and logistics of the units. Currently, it is possible to relate the increase in demand and the lack of number of professionals to the political, economic and social crisis that ravages Brazil and the scrapping of SUS, in which the quantity of services prevails to the detriment of their quality⁽³¹⁾.

Regarding urban violence, it was observed the presence of different forms of local or intrafamily violence that this professional is exposed in his daily work, both by the increasing index in the urban centers and by the conflicts experienced between the families in the community^(15,17,18). Undeniable is the fact that all society suffers because of the violence that sacrifices it today. Considering the ACS a health professional and the hope that users place in this category, it becomes frustrating the perception that this worker is at risk of experiencing a violence situation.

CONCLUSION

Based on the proposed objective that guides this study, it was identified that the main occupational risks to which ACS are exposed in their work process are: physical, related to exposure to solar radiation and humidity; associated with contact with dust; biological, related to exposure to pathogens through contact with users and animals; and psychosocial problems, especially due to the overload of work and urban violence.

Such risks are directly related to the illness of the ACS, generating both physical and mental impairments. In addition, the work process is also hampered by withdrawals for health recovery or the demotivation generated by the low prospect of changes linked to occupational risks.

Given the importance of the ACS to the ESF and public health, it is necessary to reflect on the working conditions in which these professionals are and managers, the ACS and other professionals are expected to mobilize to structure mechanisms of support and defense of this minimizing and curing occupational risks.

As a limitation of this study, the lack of professional characteristics that help to create a

locoregional profile of the ACSs evaluated in the articles included in the sample is pointed out. Such information is extremely important for the definition of occupational risks according to the location of the action, as well as the profile of the team, such as differences between teams working in urban and rural areas.

As a scientific contribution, this research may contribute to the formulation of occupational risk prevention strategies to which the ACS is exposed. It is suggested that training in safety and health of the worker be carried out with greater intensity, pointing out to the ACS what are the risks present in their activity and how to carry out the prevention. In addition, providing and educating about the use of PPE and interdisciplinary support to address complex psychosocial risks are necessary for a safe and healthy work process.

It is important to develop new researches that discuss the theme, especially in the current moment experienced in Brazil. The reforms in the policies of Basic Attention brought changes in the competences of the ACS, that alter the work process and, consequently, increase the exposure to the occupational risks, that need to be analyzed under a new scientific view.

RISCOS OCUPACIONAIS NO PROCESSO DE TRABALHO DO AGENTE COMUNITÁRIO DE SAÚDE: REVISÃO INTEGRATIVA

RESUMO

Objetivo: Identificar, na literatura científica, publicações sobre os principais riscos ocupacionais no trabalho do Agente Comunitário de Saúde (ACS). **Método:** Pesquisa qualitativa do tipo revisão integrativa de literatura, tendo como questão norteadora: Quais os riscos que os ACS estão expostos na sua atividade laboral? A coleta de dados ocorreu em maio de 2019, nas bases de dados Literatura Latino-Americana e do Caribe em Ciências da Saúde (LILACS) e Scientific Electronic Library Online (SciELO), por meio do portal da Biblioteca Virtual em Saúde (BVS), a coleção principal da Web of Science, através do Portal de Periódicos da Capes. **Resultados:** Foram identificadas 43 publicações que, após a filtragem segundo critérios de inclusão e exclusão, culminou em uma amostra de 12 artigos. Foram identificados quatro tipos de riscos, apresentados no formato de categorias de análise, a saber: Riscos físicos; Riscos químicos; Riscos biológicos; Riscos psicossociais. **Conclusões:** Diante da tamanha relevância do ACS para a Estratégia Saúde da Família e a saúde pública, cabe a reflexão sobre as condições laborais nas quais estes profissionais se encontram e espera-se que gestores, os próprios ACS e demais profissionais se mobilizem para estruturar mecanismos de apoio e defesa desta categoria, minimizando e sanando os riscos ocupacionais.

Palavras-chave: Agentes comunitários de saúde. Saúde do trabalhador. Riscos ocupacionais. Enfermagem.

RIESGOS OCUPACIONALES EN EL PROCESO DE TRABAJO DEL AGENTE COMUNITARIO DE SALUD: REVISIÓN INTEGRADORA

RESUMEN

Objetivo: identificar, en la literatura científica, publicaciones sobre los principales riesgos ocupacionales en el trabajo del Agente Comunitario de Salud (ACS). **Método**: investigación cualitativa del tipo revisión integradora de literatura, teniendo como cuestión base: ¿Cuáles los riesgos que los ACS están expuestos en su actividad laboral? La recolección de datos ocurrió en mayo de 2019, en las bases de datos *Literatura Latino-Americana e do Caribe em Ciências da Saúde* (LILACS) y *Scientific Electronic Library Online* (SciELO), por medio del portal de la *Biblioteca Virtual em Saúde*

(BVS), la colección principal de la *Web of Science*, a través del Portal de Periódicos de la Capes. **Resultados**: fueron identificadas 43 publicaciones que, tras selección según criterios de inclusión y exclusión, resultó en una muestra de 12 artículos. Fueron identificados cuatro tipos de riesgos, presentados en el formato de categorías de análisis, a saber: Riesgos físicos; Riesgos químicos; Riesgos biológicos; Riesgos psicosociales. **Conclusiones**: Ante la gran relevancia de los ACS para la Estrategia Salud de la Familia y la salud pública, cabe la reflexión sobre las condiciones laborales en las que estos profesionales se encuentran y se espera que gestores, los propios ACS y demás profesionales tomen medidas para estructurar mecanismos de apoyo y defensa de esta categoría, disminuyendo y solucionando los riesgos ocupacionales.

Palabras clave: Madres. Prematuros. Unidades Neonatales de Cuidados Intensivos. Enfermería.

REFERENCES

- 1. Faria MGA, Gallasch CH, Martins ADLX. Inclusion of nursing undergraduate students in occupational health services: an experience report. Cogitare Enferm [Internet]. 2016 [cited 2019 May 16]; 21(4):1–7. doi: http://dx.doi.org/10.5380/ce.v21i4.45245.
- 2. Brasil. Ministério da Saúde. Política Nacional de Saúde do Trabalhador e da Trabalhadora [Internet]. Portaria no 1.823, de 23 de agosto de 2012 Brasília; 2012. Disponível em: http://bvsms.saude.gov.br/bvs/saudelegis/gm/2012/prt1823_23_08_201 2.html.
- 3. Camponogara S, Erthal G, Viero CM. The environmental problem in the view of community health agents. Ciência, Cuid e Saúde [Internet]. 2013 [cited 2019 May 16]; 12(2):233–40. doi: http://dx.doi.org/10.4025/cienccuidsaude.v12i2.18584.
- 4. Jorge JC, Marques ALN, Côrtes RM, Ferreira MBG, Haas VJ, Assis Simões AL. Qualidade de vida e estresse de agentes comunitários de saúde de uma cidade do interior de Minas Gerais. Rev Enferm e Atenção à Saúde [Internet]. 2015 [cited 2019 May 16]; 4(1):28–41. Disponível em:

http://seer.uftm.edu.br/revistaeletronica/index.php/enfer/article/view/12 61/1132.

- 5. Pereira AM, Jucá AL, Lima IA, Facundes VLD, Falcão IV. The quality of life of community health agents and possible contributions of occupational therapy. Cad Bras Ter Ocup [Internet]. 2018 [cited 2019 May 16]; 26(4):784–96. doi: http://dx.doi.org/10.4322/2526-8910.ctoao1254.
- 6. Kebian LVA, Cecchetto F. Violência urbana, saúde e "sentimento": percepção dos profissionais da estratégia saúde da família. Rev Baiana Saúde Pública [Internet]. 2017 [cited 2019 May 16]; 41(1):224–35. doi: http://dx.doi.org/10.22278/2318-2660.2017.y41.n1.a1280.
- 7. Nascimento VF, Terças ACP, Hattori TY, Graça BC, Cabral JF, Gleriano JS, et al. Dificuldades apontadas pelo agente comunitário de saúde na realização do seu trabalho. Saúde (Santa Maria) [Internet]. 2017 [cited 2019 May 16]; 43(1):60–9. doi: http://dx.doi.org/10.5902/2236583423119.
- 8. Almeida MCS, Baptista PCP, Silva A. Workloads and strain process in Community Health Agents. Rev da Esc Enferm da USP [Internet]. 2016 [cited 2019 May 16]; 50(1):95–103. doi: http://dx.doi.org/10.1590/S0080-623420160000100013.
- Santos MG, Ceretta LB, Schwalm MT, Dagostim VS, Soratto MT. Desafios enfrentados pelos agentes comunitários de saúde na Estratégia Saúde da Família. Inova Saúde [Internet]. 2015 [cited 2019 May 16]; 4(1):26–46. doi: http://dx.doi.org/10.18616/is.v4i1.1765.
- 10. Morosini MV, Fonseca AF. Community workers in Primary Health Care in Brazil: an inventory of achievements and challenges. Saúde em Debate [Internet]. 2018 [cited 2019 May 16]; 42(1):261–74. doi: http://dx.doi.org/10.1590/0103-11042018S117.
- 11. Brasil. Ministério da Saúde. Politica Nacional de Atenção Básica [Internet]. Portaria no 2.436, de 21 de setembro de 2017 Brasília; 2017. Disponível em:
- http://bvsms.saude.gov.br/bvs/saudelegis/gm/2017/prt2436_22_09_2017.html.
- 12. Mauro MYC, Muzi CD, Guimarães RM, Mauro CCC. Riscos Ocupacionais em Saúde. R enferm UERJ [Internet]. 2004 [cited 2019 May 16]; 12:338–45. Disponível em: http://www.facenf.uerj.br/v12n3/v12n3a14.pdf.
- 13. Mendes KDS, Silveira RCCP, Galvão CM. Revisão integrativa: método de pesquisa para a incorporação de evidências na saúde e na

- enfermagem. Texto Context enferm [Internet]. 2008 [cited 2019 May 16]; 17(4):758–64. doi: http://dx.doi.org/10.1590/S0104-07072008000400018.
- 14. Santos C, Pimenta C, Nobre M. A estratégia PICO para a construção da pergunta de pesquisa e busca de evidências. Rev Latino-am Enferm [Internet]. 2007 [cited 2019 May 16]; 15(3):1–4. Disponível em: http://www.scielo.br/pdf/rlae/v15n3/pt_v15n3a23.pdf.
- 15. Andrade MS, Gomes MF, Lima ASR, Feitosa LS, Netto VBP, Nascimento RD, et al. Occupational hazards and health problems: perceptions of community health workers. Rev Pesqui Cuid é Fundam Online [Internet]. 2015 [cited 2019 May 16]; 7(4):3574–86. doi: http://dx.doi.org/10.9789/2175-5361.2015.v7i4.3574-3586.
- 16. Rogerio WP, Prado TN, Souza FM, Pinheiro JS, Rodrigues PM, Sant'anna APN, et al. Prevalência e fatores associados à infecção pelo Mycobacterium tuberculosis entre agentes comunitários de saúde no Brasil, usando-se a prova tuberculínica. Cad Saude Publica [Internet]. 2015 [cited 2019 May 16]; 31(10):2199–210. doi: http://dx.doi.org/10.1590/0102-311X00152414.
- 17. Cipriano FG, Ferreira LP, Servilha EA, Marsiglia RM. Relation between voice disorders and work in a group of Community Health Workers. Codas [Internet]. 2013 [cited 2019 May 16]; 25(6):548–56. Available from:

http://www.scielo.br/scielo.php?script=sci_arttext&pid=S2317-17822013000600548.

- 18. Oliveira LP, Camargo FC, Iwamoto HH. Violência relacionada ao trabalho das equipes de saúde da família. Rev Enferm e atenção à saúde [Internet]. 2013 [cited 2019 May 16]; 2(2):45–56. Disponível em: http://seer.uftm.edu.br/revistaeletronica/index.php/enfer/article/view/388.
- 19. Dilélio AS, Facchini LA, Tomasi E, Silva SM, Thumé E, Piccini RX, et al. Prevalência de transtornos psiquiátricos menores em trabalhadores da atenção primária à saúde das regiões Sul e Nordeste do Brasil. Cad Saude Publica [Internet]. 2012 [cited 2019 May 16]; 28(3):503–14. doi: http://dx.doi.org/10.1590/S0102-311X2012000300011.
- 20. Santos LFB, David HMSL. Percepções do estresse no trabalho pelos agentes comunitários de saúde. Rev Enferm UERJ [Internet]. 2011 [cited 2019 May 16]; 19(1):52–7. Disponível em: http://www.facenf.uerj.br/v19n1/v19n1a09.pdf.
- 21. Moreira TR, Zandonade E, Maciel ELN. Risk of tuberculosis infection among community health agents. Rev Saude Publica [Internet]. 2010 [cited 2019 May 16]; 4(2):332–8. doi: http://dx.doi.org/10.1590/S0034-89102010000200014.
- 22. Cezar-Vaz MR, Soares JFS, Figueiredo PP, Azambuja EP, Sant'Anna CF, Costa VZ. Percepção do risco no trabalho em saúde da família: estudo com trabalhadores no Sul do Brasil. Rev Lat Am Enfermagem [Internet]. 2009 [cited 2019 May 16]; 17(6):1–7. Disponível em: http://www.scielo.br/pdf/rlae/v17n6/pt_06.pdf.
- 23. Rodrigues PM, Moreira TR, Moraes AKL, Vieira RCA, Dietze R, Lima RCD, et al. Mycobacterium tuberculosis infection among community health workers involved in TB control. J Bras Pneumol [Internet]. 2009 [cited 2019 May 16]; 35(4):351–8. doi: http://dx.doi.org/10.1590/S1806-37132009000400009.
- 24. Vasconcellos NPC, Costa-Val R. Avaliação da qualidade de vida dos agentes comunitários de saúde de Lagoa Santa MG. Rev APS [Internet]. 2008 [cited 2019 May 16]; 11(1):17–28. Disponível em: http://www.ufjf.br/nates/files/2009/12/017-028.pdf.
- 25. Nascimento GM, David HMSL. Avaliação de riscos no trabalho dos agentes comunitários de Saúde: um processo participativo. Rev Enferm UERJ [Internet]. 2008 [cited 2019 May 16]; 16(4):550–6.

Disponível em: http://www.facenf.uerj.br/v16n4/v16n4a16.pdf.

- 26. Brasil., Ministério da Saúde. Caderno de atenção básica no41: Saúde do Trabalhador e da Trabalhadora. Brasília; 2018. 136 p. Disponível em:
- $\label{lem:http://189.28.128.100/dab/docs/portaldab/publicacoes/cadernoab_saude_do_trabalhador.pdf.$
- 27. Souza MCMR, Horta TG, Melo ES, Rocha FDB. Câncer de pele: hábitos de exposição solar e alterações cutâneas entre agentes de saúde em um município de Minas Gerais. Rev enferm Cent-Oeste Min [Internet]. 2016 [cited 2019 May 16]; 1(6):1945–56. doi: http://dx.doi.org/10.19175/recom.v0i0.920.
- 28. Gomes VHM, Faria MGA, Silva D, Gallasch CH, Perez Junior EF, Daher DV. Panorama das publicações nacionais sobre acidentes com perfurocortantes Associado a Exposição a Material Biológico. Rev Enferm Atual [Internet]. 2018 [cited 2019 May 16]; 86:1–13. Disponível em:

- https://www.revistaenfermagematual.com.br/index.php/revista/article/view/79.
- 29. Lacerda TC, Souza FM, Prado TN, Locatelli RL, Fregona G, Lima RCD, et al. Tuberculosis infection among primary health care workers. J Bras Pneumol [Internet]. 2017 [cited 2019 May 16]; 43(5):416–23. doi: http://dx.doi.org/10.1590/s1806-37562016000000211.
- 30. Almeida MCS, Baptista PCP, Silva A. Occupational accidents involving community health agents. Rev Enferm UERJ [Internet]. 2016 [cited 2019 May 16]; 24(5):1–7. doi: http://dx.doi.org/10.12957/reuerj.2016.17104.
- 31. Trindade LL, Pires DEP. Implicações dos modelos assistenciais da atenção básica nas cargas de trabalho dos profissionais de saúde. Texto e Context Enferm [Internet]. 2013 [cited 2019 May 16]; 22(1):36–42. Disponível em: http://www.scielo.br/pdf/tce/v22n1/pt_05.pdf.

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