

#### **ORIGINAL ARTICLE**

# HEALTH COMMUNITY AGENTS: SOCIODEMOGRAPHIC PROFILE, WORK CONDITIONS AND HEALTH HABITS

AGENTES COMUNITÁRIOS DE SAÚDE: PERFIL SOCIODEMOGRÁFICO, CONDIÇÕES LABORAIS E HÁBITOS DE VIDA

AGENTES COMUNITARIOS DE SALUD: PERFIL SOCIODEMOGRAFICO, CONDICIONES LABORALES Y HÁBITOS DE VIDA

Caio César Batista Andrade<sup>1</sup>, Heloisa Campos Paschoalin<sup>2</sup>, Ana Inês Sousa<sup>3</sup>, Rosangela Maria Greco<sup>4</sup>, Geovana Brandão Santana Almeida<sup>5</sup>

#### **ABSTRACT**

Objective: to describe the sociodemographic profile of Community Health Agents. *Method*: epidemiological study with 400 workers. Data collection occurred at the workplace. The analysis was performed with the SPSS version 22. *Results*: the majority of the study population was composed of women (91.2%), with a mean age of 46 years; self-declared whites (46.3%), married/common-law married (57.5%), and with complete secondary education (65.3%). A proportion of 43.6% were considered very active, 89.8% consumed alcohol in low levels and 94.3% had very low levels of tobacco dependence. The professionals had begun their work activities before the age of 20 (83.5%), 87.3% had only one job and 87.8% did not work the night shift. Regarding the time working in Primary Health Care, 41% had worked for 11 to 15 years, and 99.3% received hazard pay for unhealthy work conditions. *Conclusion*: the inclusion of this new professional category in Primary Health Care (PHC) in Brazil implies that these workers deserve increasing attention due to their work in communities, showing a positive impact on the results obtained. *Descriptors*: Community Health Agent; Worker's health; Primary Health Care; Occupational Health Nursing; Health Personnel; Social Conditions.

#### RESUMO

Objetivo: descrever o perfil sociodemográfico dos Agentes Comunitários de Saúde. *Método*: estudo epidemiológico, seccional com 400 trabalhadores. A coleta de dados ocorreu no local de trabalho. A análise foi realizada com o SPSS versão 22. *Resultados*: a maioria da população deste estudo é composta por mulheres (91,2%), média de idade de 46 anos, 46,3% se autodeclararam brancos, 57,5% eram casados/união estável e 65,3% com Ensino Médio completo; 43,6% foram considerados muito ativos, 89,8% tinham um baixo consumo de álcool e 94,3% apresentavam muito baixo grau de dependência do tabaco. Os profissionais iniciaram suas atividades laborais com menos de 20 anos (83,5%), 87,3% possuem apenas um emprego e 87,8% não trabalham no turno noturno. Quanto ao tempo de trabalho na Atenção Primária à Saúde, 41% têm de 11 a 15 anos e 99,3% recebem adicional de insalubridade. *Conclusão*: com a inserção desta nova categoria profissional na Atenção Primária à Saúde (APS) no Brasil, esses trabalhadores merecem atenção cada vez maior pelo trabalho que vem desempenhando nas comunidades, revelando um impacto positivo nos resultados obtidos. *Descritores*: Agente Comunitário de Saúde; Saúde do Trabalhador; Atenção Primária à Saúde; Enfermagem do Trabalho; Trabalhadores de Saúde; Condições Sociais.

#### RESUMEN

Objetivo: describir el perfil sociodemográfico de los Agentes Comunitarios de Salud. *Método:* estudio epidemiológico, seccional con 400 trabajadores. La recolección de datos fue en el local de trabajo. El análisis fue realizado con el SPSS versión 22. *Resultados:* la mayoría de la población de este estúdio es compuesta por mujeres (91,2), media de edad de 46 años, 46,3% se autodeclararon blancos, 57,5% eran casados/unión estable y 65,3% con Enseñanza Media completa; 43,6% fueron considerados muy activos, 89,8% tenían un bajo consumo de alcohol y 94,3% presentaban muy bajo grado de dependencia al tabaco. Los profesionales iniciaron sus actividades laborales con menos de 20 años (83,5%), 87,3% poseen apenas un empleo y 87,8% no trabajan en el turno nocturno. Cuanto al tempo de trabajo en la Atención Primaria a la Salud, 41% tienne de 11 a 15 años y 99,3% reciben adicional de insalubridad. *Conclusión:* con la inserción de esta nueva categoría profesional en la Atención Primaria a la Salud (APS) en el Brasil, esos trabajadores merecen atención cada vez mayor por el trabajo que viene desempeñando en las comunidades, revelando un impacto positivo en los resultados obtenidos. *Descriptores:* Agentes Comunitarios de Salud; Salud del Trabajador; Atención Primaria a la Salud; Enfermería del Trabajo; Personal de Salud; Condiciones Sociales.

<sup>1</sup>-Master, Federal University of Juiz de Fora/UFJF, Juiz de Fora (MG), Brazil. Email: <a href="mailto:caio\_cb8@hotmail.com">caio\_cb8@hotmail.com</a> ORCID iD: <a href="http://orcid.org/0000-0003-4653-1790">http://orcid.org/0000-0001-9765-1288;</a> <sup>3</sup>PhD, Department of Public Health Nursing, Anna Nery School of Nursing, Federal University of Rio de Janeiro. Rio de Janeiro (RJ), Brazil. Email: <a href="mailto:anaineschico@gmail.com">anaineschico@gmail.com</a> ORCID iD: <a href="http://orcid.org/0000-0002-0214-0723;">http://orcid.org/0000-0002-0214-0723;</a> <sup>4</sup>PhD, Department of Basic Nursing, Stricto Sensu Postgraduate Program in Nursing/Stricto Sensu Postgraduate Program in Collective Health, Faculty of Medicine of the Federal University of Juiz de Fora/UFJF, Juiz de Fora (MG), Brazil. Email: <a href="mailto:romagreco@gmail.com">romagreco@gmail.com</a>. ORCID iD: <a href="http://orcid.org/0000-0003-1147-276X;">http://orcid.org/0000-0003-1147-276X;</a> PhD, Department of Applied Nursing, Stricto Sensu Postgraduate Program in Nursing, Federal University of Juiz de Fora/UFJF, Juiz de Fora (MG), Brazil. Email: <a href="mailto:geovanabrandao@yahoo.com">geovanabrandao@yahoo.com</a>.br. ORCID iD: <a href="http://orcid.org/0000-0003-3865-9727">http://orcid.org/0000-0003-3865-9727</a>

INTRODUCTION

Community Health Agents (CHAs) gained strength in Brazil in the 1990s when improvements in the health conditions of the population were envisaged after the creation

of the Community Health Agents Program (CHAP) with actions aimed at reducing maternal and child mortality in poorest regions of the country, and especially in the North and Northeast of Brazil.<sup>1-2</sup>

Health workers. as called in these experiences, were recruited within community to assist in the development of health practices and promote approximation between the culture and the knowledge of the population under the follow-up supervision and of other professionals in the area.3-4

On July 10, 2002, these professionals won the right to be considered a professional category, after dispute of interests on the job market and control of professional practice. <sup>5</sup> The profession was only regulated in 2006 through Law n° 11,350 of October 05, 2006. <sup>6</sup>

Since then, some ordinances were created (Ministerial Order nº 1,886/97, Federal Decree n° 3.189/99) and laws were enacted (n° 10,507/02, n° 11,350/06) to regulate the work and creating the profession of CHA. Among the operational guidelines, we highlight the ones that define as responsibility of CHAs the following tasks: to carry out the demographic and socio-cultural diagnosis of the community; to promote and carry out individual and collective health education activities in the homes and community; to conduct periodic home visits to monitor risk situations; to strengthen community organization development; to stimulate community participation in public policies; to participate in actions that strengthen the bond between the health sector and other policies to promote quality of life.6

Thus, CHAs represent a notorious work force, with more than 200 thousand professionals working throughout the country<sup>7</sup>. They are considered professionals of fundamental importance for the implementation of the Family Health Strategy (FHS), emerging as a link between the community and the health system.<sup>2</sup>

It is believed that as these professionals are members of the community where they work, they know better the needs of the community, in which they share a same social and cultural universe, and are therefore more sensitive to the needs of the population and engaged in the struggle for improvement.<sup>8</sup>

Health community agents: sociodemographic...

Challenges can be pointed out in the knowhow of CHAs, such as the role of "translator" of the scientific universe to the popular language, the entry into the problematic context of the families assisted and the need to face the resistance of the population to change habits, requiring an approach more turned to assistance and health promotion.

Therefore, with the inclusion of this new professional category in Primary Health Care Units in Brazil, CHAs deserve an increasing attention due to the work that they have accomplished in the communities, with a positive impact on the results obtained.

In view of the growing expansion of the presence of CHAs in the field of health in the Brazilian territory and the fact that they represent the population of the communities in which they live and work<sup>9</sup>, it is necessary to know these workers better, in order to identify their needs and demands.

#### **OBJECTIVE**

• To desbribe the sociodemographic profile of Community Health Agents.

#### **METHOD**

This study is part of a larger research project entitled "Primary Care Workers: Working and Living Conditions", of the Faculty of Nursing of the Federal University of Juiz de Fora (FACENF/UFJF), which has as main objective "to know the living and health conditions of workers of the primary health care network". This study was approved by the Research Ethics Committee of the UFJF in January 14, 2015, under the number of Presentation Certification for Ethical Assessment (CAEE) 40343414000005147.

This is an epidemiological study of the cross-sectional type. According to Angelo <sup>10</sup>, cross-sectional studies are characterized by the direct observation of a certain predetermined number of individuals at a single opportunity.

The research scenario consisted of 43 Primary Health Care Units (PHCU), where CHAs work whether or not they are linked to the FHS. Among the units, 37 were located in the urban area, of which 36 where FHS units and one had the PACS model, five of rural area and one flywheel unit, in a municipality of the Zona da Mata of Minas Gerais.

According to data from the Health Department, the municipality had 500 CHAs active in its units in the year of the study. It was decided to work with census and not with a sample. In the total of 500 CHAs, 418 (83.6%) workers were considered eligible, and 82 (16.4%) were excluded. Among the

excluded ones, 25 were on sick leave, two had been assigned to other function, 15 were retired, 28 had been exonerated or dismissed. Of those approached, 18 refused to participate in the study and 12 were not found after three attempts.

The inclusion criterion was to exercise the function of CHAs in the period of data collection. Workers who were not found after three attempts were excluded from the survey.

Data collection took place in two moments: at the participants' own workplace in a date and time previously agreed between the worker and the researcher, from July to October 2015 (preliminary sample) and from October to February 2017, completing the study population. All participants were clarified about the purpose of the study and participation took place after their signing of the Informed Consent Term (ICT).

The data were collected by trained interviewers through the application of a questionnaire composed of 14 blocks. In the present study, issues related to the sociodemographic situation of the participants

Health community agents: sociodemographic...

and life and health habits were analyzed based on the following scales: IPAQ short form for classification of the level of physical activity <sup>11</sup>; AUDIT for identification of problems related to alcohol use<sup>12</sup>; and the Fagerström test that estimates the degree of nicotine dependence.<sup>13</sup>

The data was typed on a portable device with Android operating system in the "Open Data Kit" (ODK) software, a toolkit that enables data collection through Android-based mobile devices such as smartphones and tablets. The collected data is later sent to an online server, not requiring an internet connection at the time of collection for the construction of the database. General questions were used to characterize the sociodemographic profile of the participants. The analysis was carried out with the Statistical Package for the Social Sciences (SPSS) version 22.

#### **RESULTS**

Table 1. Sociodemographic description of Community Health Agents of the municipality of Juiz de Fora. 2017 (n = 400)

Agents of the municipality of Juiz de Fora, 2017 (n = 400)			
Sociodemographic variables	N	%	
Sex	35	8.8	
Male	365	91.2	
Female			
Color or race	79	19.8	
Black	129	32.3	
Brown	185	46.4	
White	06	1.8	
Yellow			
Age group (years)	253	63.3	
< 50 years	147	36.7	
≥ 50 years			
Marital status	230	57.5	
Married or common-law married	169	42.5	
Unmarried			
Schooling	19	4.8	
Up to primary education	261	65.3	
Complete secondary education	104	26.0	
Complete secondary education Higher education or more	104	20.0	

The data in Table 1 show that the majority of the population of this study was composed of women (91.2%), the mean age of CHAs was 46 years, with a minimum age of 24 years and a maximum of 73 years. Regarding color/race, 46.4% described themselves as white. As to

schooling, the majority of the participants (65.3%) had complete secondary education and, with respect to the marital situation, 57.5% said to be married or common-law married.

**Table 2.** Practice of physical activity among the Community Health Agents of the municipality of Juiz de Fora, 2017. (n = 400)

Variables	N	%	
Level of physical activity			
Very active	173	43.6	
Active	169	42.6	
Irregularly active A	18	4.5	
Irregularly active B	08	2.0	
Sedentary	32	7.3	

Note: International Physical Activity Questionnaire - short form (IPAQ-SF)<sup>11</sup>

In Table 2, we can observe a higher concentration of workers in the Very Active category (43.6%), followed by Active (42.6%), according to the IPAQ-SF classification.

Analysis of characteristics related to consumption of alcoholic beverage of CHAs.

**Table 3**. Degree of dependence on alcoholic beverages among Community Health Agents of the municipality of Juiz de Fora, 2017. (n = 400)

Variables	N	%
Degree of alcohol dependence	<u>-</u>	
Low risk consumption	359	89.8
Risk consumption	39	9.8
High risk consumption	02	0.4

Note: Alcohol Use Disorders Identification Test (AUDIT)<sup>12</sup>

**Table 4.** Use and degree of tobacco dependence among Community Health Agents of the municipality of Juiz de Fora, 2017 (n = 400)

Variables	N	%
Current use of cigarette, or pipe or	-	
homemade cigarette		
Yes	41	10.3
No, I've never smoked	272	68.0
No, I used to smoke in the past, but I	87	21.7
stopped		
Degree of dependency		
Very Low	377	94.3
Low	06	1.5
Medium	02	0.5
High	14	3.5
Very high	01	0.2
Note: Fagerström test <sup>13</sup>		

Table 4 shows that 68% of participants reported not smoking cigarettes, pipe or homemade cigarettes and 10.3% said to make use of tobacco. Regarding dependence, it was observed that the majority of workers belong to the highest category of the Fagerström test Score, thus having a very low nicotine dependence (94.3%), according to the score proposed by Fagerström.

**Table 5.** Characteristics related to the work of Community Health Agents of the municipality of Juiz de Fora, 2017. (n = 400).

Variables	N	%
Age at the start of working life		
Less than 20	334	83.5
More than 20 years	65	16.5
Number of Jobs		
One job	349	87.3
·		
≥ 2 jobs	51	12.7
Work in the night shift		
Yes	49	12.3
No	351	87.7
Time working in Primary Health Care		
Less than 5 years	99	24.8
From 6 to 10 years	47	11.8
From 11 to 15 years	164	41.0
From 16 to 20 years	90	22.4
Hazard pay		
Yes	397	99.3
No	3	0.7

Regarding the characteristics related to work, a large part of the population in this study reported having started working under the age of 20 (83.5%) and 87.3% had only one job. As to working in the night shift, 87.8% reported not working in this shift. Regarding the time working in the PHC, 41% of workers fell in the category of 11 to 15 years. As to hazard pay for unhealthy work conditions, 99.3% stated that they receive this additional remuneration.

### **DISCUSSION**

The results of the analyses showed a predominance of females (91.3%) among workers, a characteristic that has been observed in the professional category of CHAs. Other studies performed with these professionals also showed similar results; females are usually in a higher proportion in this professional category. 14-6

The feminization of the profession arises from the resistance of the community to receive male CHAs, because the families served by these workers feel a certain constraint to allow them to access their houses and reveal feminine particularities. <sup>17-8</sup>

It should also be pointed out that women have gained space in the labor market as a result of the progress in the pursuit of autonomy and also to contribute in the expenses of the household <sup>19</sup>. The work of CHAs, in fact, requires qualities inherent in women, such as patience, care, and because of the fact that women assume the role of caregivers in society.

Regarding color/race, it was observed that the majority declared to be white (46.3%),

followed by brown (32.3%). According to data from the Brazilian Institute of Geography and Statistics - IBGE (2014), the majority of the Brazilian population declares to be white (45.5%) and brown (45%), corresponding to 90.5% of the total population of the country. These numbers are in agreement with those found in the present study.

Regarding age, it was seen that the study population consisted of young adults, with a mean age of 46 years and 63.3% were younger than 50 years. Therefore, they are workers who are mostly in the full productive phase of life, as was also identified in the investigations carried out with CHAs in other regions of the country <sup>20, 21</sup>.

Regarding the schooling of the CHAs, the majority (65.3%) had completed high school, followed by those who had higher education or further education (26%). In this sense, it is worth noting Law n° 11.350/2006 that rules the activities to be carried out by these workers and the requirements to hold this position such as being a resident of the community where the work is developed, having completed the basic qualification course for CHAs and having at least completed elementary schooling<sup>6,9</sup>. In addition, the Law project 6,437/2016 has changed the required level of education of CHAs, calling for the extension of the degree of training of these professionals. In the Article 6, it proposes that these workers must have completed secondary education, which is in line with the result found in the present study.<sup>22</sup>

It should be noted that 26% of the respondents had completed higher or further education. The complexity of the work carried

out by these workers in their home visits causes them to seek more qualification and knowledge in order to become more skilled to take on their role, and more efficient and effective in the community. <sup>23-4</sup>

The fact that CHAs are in constant contact with the other PHC professionals and in constant training, they end up gaining more knowledge technical-scientific and stimulates them to search for higher education courses in the health area, in the topics they work. Another fact to be considered is the current crisis in the country. The increasing difficulty to find a job makes more qualified professionals to accept jobs that require less qualification. 5

When analyzing the age of entering the labor market, it was observed that a large part of the participants (83.5%) started their working life before the age of 20. Work is considered of extreme importance for the maintenance of the human condition. With the difficulties families have in accessing education, due to poverty, many young people start to enter the labor market early in life, either in rural or urban areas, in order to help their families and gain their own financial independence. <sup>25</sup>

As for the time working in PHC, 41% said they had been there for 11 to 15 years. It is noteworthy that this time coincides with the regulation of the CHA as professional category in 2006, thus creating a new job opportunity for these people.

It was noticed that 87.3% of the participants had only one job, 87.3% did not work overnight and 99.3% reported receiving hazard pay for unhealthy working conditions. It is known that the work of CHAs is exclusively diurnal. Therefore, those who declared to work at night shifts performed other work activities during these hours.

Regarding the hazard pay for unhealthy conditions in the work performed, the Federal Constitution provides in its Article 7, Paragraph XXIII, that additionally to other rights that aim at improving the workers' social conditions, they must receive an additional remuneration for the activities performed due to the conditions imposed by their work, which may include distressing, unhealthy or dangerous aspects according to the law.<sup>26</sup>

During the work, CHAs are exposed to situations that are determinant for their health and that can be aggravated by their work, including the experience of stress, anxiety, fatigue, gastrointestinal and respiratory disorders <sup>27</sup>. Nascimento and David <sup>28</sup> report that it is essential to pay attention to

Health community agents: sociodemographic...

these workers because of the various risks that they are exposed during their work activities. This has not been done so far, and specifically in the work of CHAs.

Concerning the life and health habits of workers, 43.3% were considered very active, followed by active (42.6%), which is a positive result. In order to have a good quality of life, it is necessary to know the importance of regular physical activity and its benefits, to fight sedentarism and its bad effects.<sup>29</sup>

In a study conducted in twenty countries including Brazil, with individuals aged between 18 and 65 years, and using the IPAQ, it was possible to verify that female workers practice moderate to vigorous physical activity more frequently than males, being the reverse in the case of light intensity activities.<sup>30</sup>

As to consumption of alcohol, 89.8% of the interviewees had a low consumption of alcohol, an important habit for the maintenance of health and for the prevention of harm. In this sense, the research of Amoedo et al. <sup>31</sup> showed that the prevalence of alcohol consumption in populations with different profiles varied from 5% to 11%, suggesting as a potential cause for the treatment of hypertension, since the use of less alcohol decreased systolic pressure values by 2-4 mmHg.

Another important result found that may favor health and reduce the risk of cardiovascular diseases was related to tobacco dependence; 94.3% of the participants were classified as having very low level of dependence. Studies have shown that tobacco use is a potential risk factor for several diseases. 32,33

#### **CONCLUSION**

The study provided a description of the sociodemographic profile of CHAs in the city studied. The results showed a large number of considered young adults, women, declared themselves to be white and who had mostly complete secondary education. This is a new professional category that counts on young workers who are in full development of their work activities and achievements, such as insertion in the job market and search for scientific knowledge, and search qualification.

It was observed that the participants stated that they had healthy life habits, were considered very active and had a low degree of dependence on alcohol and tobacco. All of these are important facts for the promotion of workers' health.

Some limitations were identified in the present study; self-referenced information may not be reliable, and may not correspond to reality. Because this is a cross-sectional study, it is not possible to establish a temporal relationship between the events. Thus, further scientific investigations seeking to know better the relation between the health and work of CHAs and the factors associated to their quality of life are still necessary to promote actions to improve the living and working conditions of these workers. This research does not exhaust the reflections on this theme and there is much to be analyzed.

Therefore, with the inclusion of this new professional category in Primary Health Care Units in Brazil, CHAs deserve an increasing attention due to the work that they have accomplished in the communities, with a positive impact on the results obtained.

#### **REFERENCES**

- 1. Faria HP, Coelho IB, Werneck MAF, Santos MA. Modelo assistencial e atenção básica à saúde [Internet]. 2nd ed. Belo Horizonte: Nescon/UFMG,Coopmed; 2010 [cited 2017 Aug 10]. Available from: <a href="https://www.nescon.medicina.ufmg.br/biblioteca/imagem/1792.pdf">https://www.nescon.medicina.ufmg.br/biblioteca/imagem/1792.pdf</a>
- 2. Durão AV, Morosini MV, Carvalho V. Os agentes comunitários de saúde e o conceito de comunidade na configuração de sua qualificação. In: Vieira M; Durão AV; Lopes MR, organizadores. Para além da comunidade: trabalho e qualificação dos agentes comunitários de saúde. Rio de Janeiro: EPSJV; 2011. p. 119-60.
- 3. Silva JA, Dalmaso ASW. Agente comunitário de saúde: o ser, o saber, o fazer. Rio de Janeiro: Fiocruz; 2002.
- 4. Santos KT, Saliba NA, Moimaz SAS, Arcieri RM, Carvalho LM. Community health agent: status adapted with family health program reality? Ciênc Saúde Colet [Internet]. 2011 Jan [cited 2017 Aug 10];16(Suppl 1): 1023-8. Available from: <a href="http://www.scielo.br/pdf/csc/v16s1/a35v16s">http://www.scielo.br/pdf/csc/v16s1/a35v16s</a>
- 5. Bachilli RG, Scavassa AJ, Spiri WC. The identity of the community healthcare agent: a phenomenological approach. Cien Saúde Colet [Internet]. 2008 Jan/Feb [cited 2017 Aug 10];13(1):51-60. Available from: http://www.scielo.br/pdf/csc/v13n1/09.pdf
- 6. Congresso Nacional (BR). Lei nº. 11.350, de 05 de outubro de 2006. Regulamenta o § 50 do art. 198 da Constituição, dispõe sobre o aproveitamento de pessoal amparado pelo parágrafo único do art. 20 da Emenda Constitucional no 51, de 14 de fevereiro de

Health community agents: sociodemographic...

- 2006, e dá outras providências [Internet]. Brasília: Congresso Nacional; 2006 [cited 2017 Aug 10]. Available from: <a href="http://www.planalto.gov.br/ccivil\_03/\_ato20">http://www.planalto.gov.br/ccivil\_03/\_ato20</a> 04-2006/2006/lei/l11350.htm
- 7. Bornstein VJ, David HMSL, Araújo JWG. Community health agents: reconstruction of the risk concept at local level. Interface comun saúde educ [Internet]. 2010 Jan/Mar;14(32):93-101. Available from: <a href="http://www.scielo.br/pdf/icse/v14n32/08.pd">http://www.scielo.br/pdf/icse/v14n32/08.pd</a>
- 8. Nunes MO, Trad LB, Almeida BA, Homem CR, Melo MCIC. Community-based health workers: building the identity of this hybrid, polyphonic character. Cad Saúde Pública [Internet]. 2002 Nov/Dec [cited 2017 Aug 10];18(6):1639-46. Available from: <a href="http://www.scielo.br/pdf/csp/v18n6/13260.p">http://www.scielo.br/pdf/csp/v18n6/13260.p</a> df
- 9. Ministério da Saúde (BR). Portaria nº 1.823, de 23 de agosto de 2012. Institui a política nacional de saúde do trabalhador e da trabalhadora [Internet]. Brasília: Ministério da Saúde; 2012 [cited 2016 Mar 01]. Available from:

## http://bvsms.saude.gov.br/bvs/saudelegis/gm/2012/prt1823\_23\_08\_2012.html

- 10. Angelo JR. Conceitos básicos em epidemiologia [Internet]. São José dos Campos: Ministério da Ciência e Tecnologia, Instituto Nacional de Pesquisas Espaciais; 2011 2017 Aug 10]. Available http://www.dpi.inpe.br/geocxnets/wiki/lib/e xe/fetch.php?media=wiki:branches:epidemiol ogia\_jussara.pdf
- 11. Benedetti TRB, Antunes PC, Rodriguez-Añez CR, Mazo GZ, Petroski Reproducibility validity and the International Physical Activity Questionnaire (IPAQ) in elderly men. Rev bras med esporte [Internet]. 2007 Jan/Fev [cited 2017 Aug 10];13(1):11-6. **Available** from: http://www.scielo.br/pdf/rbme/v13n1/en\_04 .pdf
- 12. Abreu AMM, Jomar RT, Souza MHN, Guimarães RM. Harmful consumption of alcoholic beverages among users of a family health unit. Acta paul enferm [Internet]. 2012 [cited 2017 Aug 10];25(2):291-5. Available from:

## http://www.scielo.br/pdf/ape/v25n2/en\_a21 v25n2.pdf

13. Calasans DA, Araújo GAS, Araújo DS, Alexandre AS, Sampio LMM, Angelini AB. Prevalência de discentes fumantes, estudo da dependência da nicotina. Conscientice Saúde [Internet]. 2011 [cited 2017 Aug 10];10(1):38-44. Available from:

http://www.redalyc.org/pdf/929/9291718800 6.pdf

- 14. Lopes DMQ, Beck CLC, Prestes FC, Weiller TH, Colomé JS, Silva M. Community Health Agents and their experiences of pleasure and distress at work: a qualitative study. Rev Esc Enferm USP [Internet]. 2012 June [cited 2017 Aug 10];46(3):633-40. Available from: <a href="http://www.scielo.br/pdf/reeusp/v46n3/en\_15.pdf">http://www.scielo.br/pdf/reeusp/v46n3/en\_15.pdf</a>
- 15. Maissiat GS. Prazer e sofrimento de trabalhadores da atenção básica à saúde à luz da teoria da psicodinâmica do trabalho. [dissertation] [Internet]. Porto Alegre: Universidade Federal do Rio Grande do Sul; 2013. Available from: <a href="http://www.lume.ufrgs.br/bitstream/handle/10183/76335/000893338.pdf?sequence=1">http://www.lume.ufrgs.br/bitstream/handle/10183/76335/000893338.pdf?sequence=1</a>
- 16. Lino DCSF. Saúde mental e condições de trabalho entre agentes comunitários de saúde. [dissertation] [Internet]. Jequié(BA): Universidade Estadual do Sudoeste da Bahia; 2013. Available from: <a href="http://www.uesb.br/ppgenfsaude/dissertaco">http://www.uesb.br/ppgenfsaude/dissertaco</a> es/turma4/DEBORA-CRISTIANE-SILVA-FLORES-LINO.pdf
- 17. Bezerra AFB, Espírito Santo ACG, Batista Filho M. Conceptions and practices of community health agents caring for the elderly. Rev saúde pública [Internet]. 2005 [cited 2017 Aug 10];39(5):809-15. Available from:

http://www.scielo.br/pdf/rsp/v39n5/26303.p df

- 18. Machado MH. Trabalhadores da saúde e sua trajetória na reforma sanitária. In: Lima NT, Gerschman S, Edler FC, Suárez JM, organizadores. Saúde e democracia: histórias e perspectivas do SUS. Rio de Janeiro: Fiocruz; 2005. p. 257-81.
- 19. Mariucc SEM, Almeida CCR. Mulher e trabalho: um debate necessário no contexto das políticas neoliberais. In: 1° Simpósio sobre Estudos de Gênero e Políticas Públicas, Anais do 1° Simpósio sobre Estudos de Gênero e Políticas Públicas; 2010; Universidade Estadual de Londrina [Internet]. Londrina UEL; 2010 [cited 2017 Aug 10];25-35. Available from: http://www.uel.br/eventos/gpp/pages/arquivos/3.ElzaMariucci.pdf
- 20. Ferraz L, Aerts DRGC. Daily activities by community health workers in the family health program in Porto Alegre, Brazil. Ciênc Saúde Coletiva [Internet]. 2005 [cited 2017 Aug 10];10(2):347-55. Available from: <a href="http://www.scielo.br/pdf/csc/v10n2/a12v10n">http://www.scielo.br/pdf/csc/v10n2/a12v10n</a> 2.pdf
- 21. Kuthcovsky ACGC, Takayanagui AMM, Santos CB, Kluthcovsky FA. Evaluation of overall quality of life of community health

Health community agents: sociodemographic...

agents: the relative contribution of sociodemographic variables and domains of quality of life. Rev psiquiatr Rio Gd Sul [Internet]. 2007 May/Aug [cited 2017 Aug 10];29(2):176-83. Available from: <a href="http://www.scielo.br/pdf/rprs/v29n2/v29n2a">http://www.scielo.br/pdf/rprs/v29n2/v29n2a</a> 09.pdf

- 22. Câmara dos Deputados (BR). Projeto de Lei nº 6.437, de 2006. Altera a Lei nº 11.350, de 5 de outubro de 2006, para dispor sobre as atribuicões das profissões do comunitário de saúde e do agente de combate às endemias, ampliar o grau de formação profissional, e estabelecer as condições e tecnologias necessárias para a implantação dos cursos de aprimoramento dos Agentes Comunitários de Saúde e dos Agentes de Combate às Endemias [Internet]. Brasília: Câmara dos Deputados; 2016 [cited 2017 Aug Available http://www.camara.gov.br/proposicoesWeb/ prop\_mostrarintegra?codteor=1505914
- 23. Mascarenhas CHM, Prado FO, Fernandes MH. Factors associated with the quality of life of community health agents. Ciênc Saúde Colet [Internet]. 2013 May [cited 2017 Aug 10];18(5):1375-86. Available from: http://www.scielo.br/pdf/csc/v18n5/23.pdf
- 24. Gouvêa GR, Silva MAV, Pereira AC, Mialhe FL, Cortellazzi KL, uerra LM. Evaluation of knowledge of oral health of community health agents connected with the family health strategy. Ciênc Saúde Colet [Internet]. 2015 [cited 2017 Aug 10];20(4):1185-97. Available from:

http://www.scielo.br/pdf/csc/v20n4/1413-8123-csc-20-04-01185.pdf

- 25. Santos AL, Gimenez DM. Inserção dos jovens no mercado de trabalho. Estud av [Internet]. 2015 Sept/Dec [cited 2017 Aug 10];29(85):153-68. Available from: <a href="http://www.scielo.br/pdf/ea/v29n85/0103-4014-ea-29-85-00153.pdf">http://www.scielo.br/pdf/ea/v29n85/0103-4014-ea-29-85-00153.pdf</a>
- 26. Oliveira RS, Fonseca MBS, Benkendorf CA. O adicional de insalubridade e a ação direta de inconstitucionalidade 4020. JICEX [Internet] 2013;1(1). Available from: <a href="http://www.santacruz.br/ojs/index.php/JICEX/article/view/187/463">http://www.santacruz.br/ojs/index.php/JICEX/article/view/187/463</a>
- 27. Ministério da Saúde (BR), Organização Pan-Americana da Saúde no Brasil. Doenças relacionadas ao trabalho: manual de procedimentos para os serviços de saúde [Internet]. Brasília: Ministério da Saúde, Organização Pan-Americana da Saúde no Brasil; 2001 [cited 2017 Aug 10]. Available from:

http://bvsms.saude.gov.br/bvs/publicacoes/doencas\_relacionadas\_trabalho1.pdf

Andrade CCB, Paschoalin HC, Sousa AI et al.

28. Nascimento GM, David HMSL. Assessing risks at the community health agent's work: a participatory process. Rev enferm UERJ [Internet]. 2008 Oct/Dec [cited 2017 Aug 10];16(4):550-6. Available from: <a href="http://www.facenf.uerj.br/v16n4/v16n4a16.">http://www.facenf.uerj.br/v16n4/v16n4a16.</a>

- 29. Silva RS, Silva I, Silva RA, Souza L, Tomasi E. Physical activity and quality of life. Ciênc Saúde Colet [Internet]. 2010 [cited 2017 Aug 10];15(1):115-20. Available from: <a href="http://www.scielo.br/pdf/csc/v15n1/a17v15n1.pdf">http://www.scielo.br/pdf/csc/v15n1/a17v15n1.pdf</a>
- 30. Bauman A, Bull F, Chey T, Craig CL, Ainsworth BE, Sallis JF, et al. The international prevalence study on physical activity: results from 20 countries. Int j behav nutr phys act [Internet]. 2009 Mar [cited 2017 Aug 10];6(21). Available from: <a href="https://ijbnpa.biomedcentral.com/articles/10.1186/1479-5868-6-21">https://ijbnpa.biomedcentral.com/articles/10.1186/1479-5868-6-21</a>
- 31. Amoedo C, Passarelli Junior O, Borelli FAO, Souza MG. Tratamento não medicamentoso da hipertensão arterial. In: Nobre F, Serrano Junior CV, organizadores. Tratado de cardiologia SOCESP. São Paulo: Manole; 2005. p. 453-63.
- 32. Nunes SOV, Castro MRP, Castro MSA. Tabagismo, comorbidades e danos à saúde. In: Nunes SOV, Castro MRP, organizadores. Tabagismo: abordagem, prevenção e tratamento [Internet]. Londrina: EDUEL; 2011 [cited 2017 Aug 10]. p. 17-38. Available from: <a href="http://books.scielo.org/id/sj9xk/pdf/nunes-9788572166751-01.pdf">http://books.scielo.org/id/sj9xk/pdf/nunes-9788572166751-01.pdf</a>
- 33. Mendis S, Puska P, Norrving B, editors. Global atlas on cardiovascular disease prevention and control [Internet]. Genebra: World Health Organization; 2011 [cited 2017 Aug 10]. Available from: <a href="http://www.who.int/cardiovascular\_diseases/publications/atlas\_cvd/en/">http://www.who.int/cardiovascular\_diseases/publications/atlas\_cvd/en/</a>

Submission: 2017/11/22 Accepted: 2018/05/04 Publishing: 2018/06/01

### **Corresponding Address**

Caio César Batista Andrade Rua José Lourenço Kelmer, s/n

Bairro Martelos

CEP: 36036-330 – Juiz de Fora (MG), Brazil