







Assessment of the lifestyle and emotional health of community health workers

Ana Júlia Pereira dos Santos¹ , Isabella Mariana Souza Andrade¹ , Tatyana Maria Pessoa Martinelli¹ ,
Pedro Henrique Fleury da Silva¹ , Leonardo Lamêgo Cardoso¹ , Lucinéia de Pinho^{1,2} .

Abstract: Assessment of the lifestyle and emotional health of community health workers. Introduction: Community health workers (CHWs) play a key role in promoting health at the community level; however, their own health behaviors, including diet, are often overlooked. **Objective:** Analyze the of the lifestyle and emotional health of community health workers. **Materials and methods:** Cross-sectional and analytical study conducted in the Northern region of Minas Gerais, Brazil. Data were collected online between July and August 2020. We evaluated factors associated with the dietary patterns of 1220 CHWs. Poisson regression was used to calculate prevalence ratios (PRs) and 95% confidence intervals (95% CI) for unhealthy eating habits and associated variables. **Results:** The prevalence of unhealthy food consumption was 44.7%. This behavior was more frequent among CHWs aged ≥ 40 years (PR=1.34), with over 11 years of education (PR=1.17), lower income (PR=1.35), and among those who reported limited or no availability of personal protective equipment (PPE) (PR=1.20). Higher prevalence was also observed in CHWs with depression (PR=1.16), anxiety (PR=1.26), sedentary lifestyle (PR=1.16), and weight gain (PR=1.53). **Conclusions:** There is a high intake of ultra-processed and energy-dense foods among CHWs. Promoting healthy lifestyle education for CHWs is essential to ensure their well-being and effectiveness in delivering primary care within the Family Health Strategy (FHS), as the caregiver's health directly impacts their capacity to care for others. **Arch Latinoam Nutr 2026; 76(1): 30-37.**

Keywords: Occupational health; community health agents; eating habits; risk factors.

Introduction

Community Health Workers (CHW) are the professionals responsible for enabling prevention and health promotion, identifying health

Resumen: Evaluación del estilo de vida y salud emocional del personal de salud comunitario. Introducción: Los agentes comunitarios de salud (ACS) desempeñan un papel clave en la promoción de la salud comunitaria; sin embargo, sus propios hábitos de salud, incluida la alimentación, a menudo son descuidados. **Objetivo:** Analizar el estilo de vida y la salud emocional de los agentes comunitarios de salud. **Materiales y métodos:** Estudio transversal y analítico realizado en la región Norte de Minas Gerais, Brasil. La recolección de datos se llevó a cabo en el período entre julio y agosto de 2020. Se evaluaron factores asociados a los patrones alimentarios de 1220 ACS. Se aplicó regresión de Poisson para calcular la razón de prevalencia (RP) e intervalos de confianza del 95% (IC95%) para hábitos alimentarios no saludables y variables asociadas. **Resultados:** La prevalencia del consumo de alimentos no saludables fue del 44,7%. Esta conducta fue más frecuente entre ACS con edad ≥ 40 años (RP=1,34), con más de 11 años de escolaridad (RP=1,17), bajos ingresos (RP=1,35) y entre aquellos/as que reportaron disponibilidad limitada o ausencia de Equipos de Protección Personal (EPP) (RP=1,20). También se observó mayor prevalencia entre quienes presentaban depresión (RP=1,16), ansiedad (RP=1,26), sedentarismo (RP=1,16) y aumento de peso (RP=1,53). **Conclusiones:** Existe una alta ingesta de alimentos ultraprocesados y con alta densidad energética entre los ACS. Promover la educación en estilos de vida saludables es fundamental para garantizar el bienestar de estos trabajadores y su eficacia en la atención primaria dentro de la Estrategia de Salud de la Familia (ESF), ya que la salud del cuidador impacta directamente en su capacidad para cuidar a otros. **Arch Latinoam Nutr 2026; 76(1): 30-37.**

Palabras clave: Salud laboral; agentes comunitarios de salud; hábitos alimentarios; factores de riesgo.

problems in certain spaces and idealizing clinical and sanitary interventions that are effective and effective in solving the problem (1,2). Having regard to its role, in addition to promotion, taking care of one's own health is essential, so a healthy and appropriate diet, together with the strengthening of the immune system, is of paramount importance for the prevention of various infections, role in the treatment and rehabilitation of sick patients (3,4).

¹University Center UNIFIPMOC. Montes Claros, MG, Brazil.

²University of Montes Claros (Unimontes). Montes Claros, MG, Brazil. Autor para la correspondencia: Lucinéia de Pinho, e-mail: lucineiapinho@hotmail.com



The CHW face in daily life several challenges, because they are the target of great demand of the population, which can trigger situations of extreme psychological have little time and consequently difficulty to plan healthy eating habits (5,6). In addition, Moreover, evidence indicates that chronic stress and lifestyle changes are associated with alterations in dietary patterns among the population, often leading to increased consumption of ultra-processed foods — a behavior that tends to persist even after the reduction of stressors (7,8).

The eating habits of health professionals, including ACS, often do not reflect the practices that they themselves guide the population (9). This contradiction may be related to poor working conditions, long hours, emotional overload and the absence of institutional policies aimed at self-care of workers (10).

This study aims to analyze the food consumption of community health agents (CHW) in the northern region of Minas Gerais.

Materials and methods

This research is part of the base project entitled "Working conditions and health of community health workers in the north of Minas Gerais". This was a cross-sectional study conducted with the CHW population of the Family Health Strategies (FHS) municipalities located in the northern region of Minas Gerais. The definition of the sample size took into account the following parameters: estimated prevalence of 50% (which provides the largest sample size), 95% confidence level and margin of error of 4%, with correction for finite population. Correction was performed for the design effect, adopting $Deff = 2.0$ and to compensate for possible non-responses and losses an increase of 12% was established. The minimum sample size of $n = 1167$ CHW was estimated, being $n_1 = 567$ (48.6%) agents of the host municipalities and $n_2 = 600$ (51.4%) of the other municipalities in the north of Minas Gerais.

The inclusion criterion used for the CHWs to participate in the study was to be registered in the National Registry of Health Facilities (CNES), and the non-inclusion criteria were to be on sick leave or on vacation, to be away or not accept to participate in the study. Data collection was conducted online between July and August 2020, through self-administered questionnaires (11). The questionnaire was made available to research participants through the WhatsApp messaging application, using the Google Forms system.

As regards the assessment of the ACS diet, the following items were used: frequency of ingestion of vegetables, fruits, snacks and processed/ultra-processed foods during the week (1 to 2 days a week, 3 to 4 days a week, 5 to 6 days a week, every day, almost never, ever). Food consumption was measured using items adapted from the questionnaire of the Chronic Disease Risk and Protective Factors Surveillance System (Vigitel) (11). Additionally, changes in eating habits during the pandemic were assessed (reduce a lot, reduce a little, stay the same, don't change, increase a little, increase a lot). In this study, the outcome variable was defined as the increase in the consumption of unhealthy foods (snacks and processed/ultra-processed foods) and the reduction in the consumption of healthy foods (vegetables, fruits) during the pandemic.

For the evaluation of sociodemographic factors, the following variables were considered: identification, sex (female or male), date of birth, schooling (elementary, incomplete high school, complete high school, incomplete higher education, complete higher education), family income (kept the same income, income decreased, income increased), number of people in the household during social isolation (kept the same number of people, decreased the number of people, increased the number of people), number of rooms in the household, marital status (single, divorced/separated/widowed, married/stable union) and skin color (white, black, yellow, brown or indigenous).

To evaluate the practice of physical activity, we applied the International Physical Activity Questionnaire (IPAQ), a widely used tool recommended by the World Health Organization and validated for the Brazilian population (12). This instrument allows estimating the level of physical activity in adults based on the duration, intensity, and frequency of activities performed during the week preceding the interview. For analysis, the

participants were classified into two categories: *inactive or insufficiently* active when accumulating less than 150 minutes of physical activity per week, and active when engaging in 150 minutes or more within the same period.

Pearson's chi-square test was used in the bivariate analysis to evaluate factors associated with food consumption. The magnitude of the association between dependent and independent variables was assessed by the crude and adjusted Prevalence Ratio (PR), with their respective 95% confidence intervals (CI-95%). For the construction of the models, the backward criterion was used, with the removal of the variables from the model one by one, according to the *p*-value. For the permanence of the variables in the final model, a significance level of 5% was considered. To evaluate the possible factors associated with food consumption, the Poisson model with robust variances was used. The Deviance test was used to evaluate the quality of the final model. The data obtained were analyzed by the computer program Statistical Package for the Social Sciences (SPSS®) for Windows®, version 20.0.

The study project was approved by the Research Ethics Committee of the State University of Montes Claros (CEP/Unimontes): Opinion n. 2,425,756, issued on December 8, 2017. The Informed Consent Form was signed by the CHW as a precondition for data collection.

Results

The study included 1,220 Community Health Workers, most participants were women (85.1%) and under 40 years of age (71.1%), with up to 11 years of schooling (67%). More than half had over five years of professional experience (53.2%) and were employed under CLT-type contracts (60.6%). Regarding lifestyle characteristics, 50.6% did not engage in physical activity. The other sociodemographic characteristics, working conditions, health and life habits are described in Table 1 and Table 2.

Table 1. Unhealthy food consumption among community health agents, according to sociodemographic variables and working in the north of Minas Gerais, 2020.

Variables	Unhealthy consumption				<i>p</i> -value
	Total n (%)	No (%)	Yes (%)	Gross PR* (95% CI)**	
Sociodemographic					
Gender					
Male	182(14.9)	106(58.2)	76(41.8)	1	0.391
Female	1038(85.1)	569(54.8)	469(45.2)	1.08(0.90-1.30)	
Age					
41 years or more	352(28.9)	217 (61.6)	135(38.4)	1	0.005
Up to 40 years	868(71.1)	458(52.8)	410(47.2)	1.23(1.06-1.43)	
Education					
Up to 11 years	818(67.0)	481(58.8)	337(41.2)	1	<0.001
Over 11 years	402(33.0)	194(48.3)	208(51.7)	1.26(1.11-1.42)	
Decreased income					
No	935(76.6)	560(59.9)	375(40.1)	1	<0.001
Yes	285(23.4)	115(40.4)	170(59.6)	1.49(1.31-1.68)	
Working conditions					
Service time					
Up to 5 years	571(46.8)	299(52.4)	272(47.6)	1	0.051
Over 5 years	649(53.2)	376(57.9)	273(42.1)	0.88(0.78-1.00)	
Employment					
Official servant/Effective	481(39.4)	280(58.2)	201(41.8)	1	0.102
Contracted/CLT-type	739(60.6)	395(53.5)	344(46.5)	1.11(0.98-1.27)	
Personal Protective Equipment (PPE)					
Adequate	470(38.5)	296(63.0)	174(37.0)	1	<0.001
Inadequate	750(61.5)	379(50.5)	371(49.5)	1.34(1.16-1.53)	

Note: * PR = Prevalence Ratio, ** CI = Confidence Interval

Table 2. Unhealthy food consumption among community health agents, according to health conditions and life habits in the north of Minas Gerais, 2020.

Variables	Total n (%)	Unhealthy consumption			
		No (%)	Yes (%)	Gross PR* (95% CI) **	p-value
Health conditions and life habits					
Depression					<0.001
No	834(68.4)	514(61.6)	320(38.4)	1	
Yes	386(31.6)	161(41.7)	225(58.3)	1.52(1.35-1.71)	
Anxiety					<0.001
No	710(58.2)	452(63.7)	258(36.3)	1	
Yes	510(41.8)	223(43.7)	287(56.3)	1.42(1.22-1.66)	
Physical activity					<0.001
Yes	603(49.4)	369(61.2)	234(38.8)	1	
No	617(50.6)	306(49.6)	311(50.4)	1.29(1.14-1.48)	
Increased weight					<0.001
No	631(51.7)	418(66.2)	213(33.8)	1	
Yes	589(48.3)	257(43.6)	332(56.4)	1.67(1.47-1.90)	
Increased Alcohol consumption					<0.001
No	1159(95.0)	13(46.4)	15(53.6)	1	
Yes	61(5.0)	113(57.9)	82(42.1)	1.34(1.04-1.63)	

Note: * PR = Prevalence Ratio, ** CI = Confidence Interval

In this study, 44.7% of Community Health Workers (n = 545) reported unhealthy food consumption during the pandemic. Among CHWs, there was a 21.1% reduction in vegetable consumption and a 25.2% reduction in fruit consumption, while the consumption of sweets increased by 18.0% and the consumption of ultra-processed foods increased by 15.9%.

In the bivariate analysis between unhealthy consumption and the independent variables evaluated that showed significant association, level of 0.20, with the outcome were: age, education, decreased income, length of service, employment relationship, offer of EPIs, depression, anxiety, physical activity, weight gain and increased alcohol consumption.

The results of the multiple analysis are presented in Table 3. The Deviance test indicated that the model presented adequate fit quality (p-value =794.53). Unhealthy food consumption was more prevalent among community health agents aged 41 years or more (PR=1.34- 95%CI 1.05;1.71), schooling above 11 years of schooling (PR=1.17 - 95%CI 1.03;1.31), with decreased income (PR=1.35 - 95%CI 1.20;1.52) and inadequate offer of PPE (PR=1.20 - 95%CI 1.05-1.37).

As for health conditions and life habits, it was observed that the highest prevalence of unhealthy food consumption was among community health agents who have depression (PR=1.16 - 95%CI 1.02-1.32) and anxiety (PR=1.26 - 95%CI 1.10-1.43), non-practicing of physical activities (PR=1.16 - 95%CI 1.02-1.32) and weight gain (PR=1.53 - 95% CI 1.35-1.74).

Table 3. Poisson regression analysis, adjusted, of the variables associated with unhealthy food consumption among community health agents in the north of Minas Gerais, 2020.

Variables	Adjusted PR* (95% CI) **	p-value
Age		0.017
41 years or more	1	
Up to 40 years	1.34 (1.05-1.71)	
Education		0.012
Up to 11 years of study	1	
Over 11 years of study	1.17 (1.03-1.31)	
Decreased income		0.020
No	1	
Yes	1.35 (1.20-1.52)	
Personal Protective Equipment (PPE)		0.007
Adequate	1	
Inadequate	1.20 (1.05-1.37)	
Depression		0.020
No	1	
Yes	1.16 (1.02-1.32)	
Anxiety		0.001
No	1	
Yes	1.26 (1.10-1.43)	
Physical activity		0.049
Yes	1	
No	1.16 (1.02-1.32)	
Increased weight		<0.001
No	1	
Yes	1.53 (1.35-1.74)	

Note: * PR = Prevalence Ratio; ** CI = Confidence Interval; Omnibus 83.82 p-value= <0.001; Deviance=794.53; p-value = 0.656

Discussion

The findings of this study indicate a high prevalence of inadequate eating habits in CHW. A study conducted in Brazil in 2020 (13), presented how Brazilians reduced the consumption of healthy foods and increased that of ultra-processed and high energy density, such as chips, popcorn, chocolates and ice

cream. In this sense, the increased intake of unhealthy foods results in health losses, such as increased obesity, hypertension, diabetes and cardiovascular diseases (14).

Although community health agents have knowledge about healthy lifestyle habits, the distance between knowledge and reported behavior is notorious (7). It is essential that health professionals assume healthy behaviors, so that they can influence their patients on the risk of chronic non-communicable diseases, and provide well-being among them (15).

It is also reiterated that the CHW has a role as a communicator between health and the population, being the holder of a community identity that reflects throughout the lifestyle of the community with which it relates. Thus, there is a need for a holistic valuation of these professionals, so that they can positively influence the quality of life of Brazilians (9).

Age up to 40 years was associated with food consumption. From this perspective, a study with data from the 2013 National Health Survey (PNS - *Pesquisa Nacional de Saúde*) regarding multidimensional profiles of lifestyle-related risk factors in adult individuals showed an association between lifestyles and sociodemographic characteristics. The healthy lifestyle was more present in older individuals, where several factors may be associated, such as greater awareness of health, greater concern due to the emergence of diseases and survival bias (16).

Of all the CHW who answered the questionnaire, 49.9% said they performed physical activity, and most of these had healthy food consumption. In contrast, a cross-sectional study that analyzed changes in the lifestyle of Brazilian adults showed that before the pandemic, 30.1% of people performed physical activity in contrast to only 12% during COVID-19 (13). The study confirms that compared to the general population, the number of CHW performing physical activity is higher and that unhealthy food consumption has a higher prevalence in the general population.

Weight gain was evidenced in 48.3% of the CHW. In the NutriNet coorte, the weight gain exceeded the weight loss (17). Weight gain can cause overweight or obesity and is associated with a higher prevalence of hypertension (18) and an increase in cardiovascular diseases (19).

Mental disorders are the cause of 9.5% of total disability-adjusted life years in Brazil, 35% of which are due to depressive disorders and 28% for anxiety disorders (20). Given their high prevalence and impact on functional capacity, examining circumstances that may influence mental health status in the present study population is particularly relevant. Symptoms of anxiety and depression are also prevalent among community health workers (CHWs) (21). Studies on the Psychiatry lifestyle have related some health behaviors, such as eating habits, to mental disorders, such as depression and anxiety (19). It was evident that the consumption of fruits and vegetables are associated with decreased risks and symptoms of depression (22). In addition, there was a strong association between the regular intake of soft drinks, sweets, ultra-processed foods and the substitution of lunch for quick snacks with the increased prevalence of depression (23).

The sociodemographic characteristics may influence the increase in overweight and obesity. In a previous study, higher prevalence rates of obesity were found in all age groups in females with less schooling (24). Study to investigate the variations of anthropometric indicators between 2013 and 2019 and the factors associated with obesity in Brazil, observed that for both males and females, factors associated with obesity were age, to live with a partner, level of instruction directly associated among men, and inversely associated among women (25).

The socioeconomic level and the educational level of individuals are associated with the lifestyle and, consequently, with obesity (24). This relationship is particularly relevant to the present study, as community health agents are both health workers and members of the communities they serve, and their living conditions may influence their own health

behaviors. It is essential to implement intersectoral policies that expand access to healthy foods and promote the practice of physical activity, considering the economic, social, cultural, and environmental contexts of different population groups. For Community Health Workers, the adoption of healthy eating habits contributes to their own well-being and positively influences their professional performance. As health professionals who also serve as educators and role models within their communities, their practices can encourage healthier behaviors among the population, reinforcing the importance of supporting conditions that enable these habits (25).

A limitation of this study is the related to the data collection method. The use of an online questionnaire distributed via Google Forms and WhatsApp may have introduced selection bias, as participation depended on internet access, familiarity with digital tools, and voluntary engagement. Consequently, CHWs who were less connected to digital platforms or less available may be underrepresented in the sample. This should be considered when interpreting the findings.

The adoption of a healthy diet by the community health agents proved to be essential for the improvement of their well-being, in order to consequently impact positively on the exercise of the profession. Such eating habits, when placed under the parameter of the health professional, enable the provision of a better-quality service to the population, through this worker who acts not only as a caregiver, but also as an educator and model example.

Conclusions

The consumption of ultra-processed and high-energy-density foods was observed among Community Health Workers (CHWs) during the period evaluated. The factors associated with this dietary pattern, including age under 40 years, education level below 11 years, low income, limited or no availability of personal protective equipment (PPE), presence of depressive and anxiety symptoms, weight gain, and sedentary behavior. These findings reinforce the need for intervention strategies aimed at promoting healthier eating habits and lifestyle practices among CHWs. Such strategies may include nutrition education programs, psychosocial support actions, improved access to healthy foods within work environments,

the creation of opportunities for regular physical activity, and the strengthening of occupational health policies. By addressing both individual and structural determinants, these interventions may contribute to improving the health and well-being of CHWs and enhancing their capacity to act as health promoters within the community.

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Conflict of Interest

We declare that we have no conflict of interest, financial or affiliation.

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