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Quality of Work Life (QWL) and the musculoskeletal symptoms in Community Health Workers

Qualidade de Vida no Trabalho (QVT) e sintomas osteomusculares em Agentes Comunitários de Saúde

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ABSTRACT | INTRODUCTION: The Community Health Agent, in their work environment, deals with several challenges, such as the numerous tasks, the demand for productivity, the lack of resources, interpersonal conflicts and inadequate salary conditions, thus implying physical and mental overload; aspects that can affect the quality of life and the onset of musculoskeletal disorders. **OBJECTIVE:** Evaluate the Quality of Life at Work (QWL) and the presence of musculoskeletal symptoms in Community Health Agents (CHA). **METHODS:** This is a cross-sectional study, with convenience sampling, in which the participants were the CHA servers working in the Family Health Units of the Second Health Health District in Maceió - Alagoas. Data were collected using the following instruments: a sociodemographic questionnaire; a quality of work life assessment questionnaire (QWLQ-bref); and the musculoskeletal symptoms questionnaire (QNSO). **RESULTS:** Thirty-eight CHAs participated, most of them female (86.8%). It was obtained an average QWL score of 59.84, which represents a satisfactory position. In the analysis by domains, the personal, psychological and physical are also in the range of satisfaction, except for the professional domain with a score of 53.44, classified as neutral. Regarding musculoskeletal symptoms, the neck (55.3%) and lumbar spine (47.4%) were the most affected regions in the last 12 months. **CONCLUSIONS:** The results of this study indicate the need to adopt improvements in working conditions, both in the sense of rethinking the issues that affect QWL, as well as in the management of musculoskeletal problems.

KEYWORDS: Workplace. Quality of Life. Musculoskeletal Diseases. Community Health Workers.

RESUMO | INTRODUÇÃO: O Agente Comunitário em Saúde, em seu ambiente de trabalho, lida com vários desafios, tais como: as inúmeras tarefas, a exigência de produtividade, a falta de recursos, os conflitos interpessoais e as condições salariais inadequadas, implicando assim em sobrecarga física e mental, aspectos que podem repercutir na qualidade de vida e no aparecimento de distúrbios osteomusculares. **OBJETIVO:** Avaliar a Qualidade de Vida no Trabalho (QVT) e a presença dos sintomas osteomusculares dos Agente Comunitário de Saúde (ACS). **MÉTODOS:** Trata-se de um estudo transversal, com amostragem por conveniência, cujos participantes foram os ACS atuantes nas Unidades de Saúde da Família do Segundo Distrito Sanitário de Saúde em Maceió - Alagoas. Coletou-se os dados por meio dos seguintes instrumentos: questionário sociodemográficos; questionário de avaliação da qualidade de vida no trabalho (QWLQ-bref); e o questionário de sintomas osteomusculares (QNSO). **RESULTADOS:** Participaram 38 ACS, sendo a maioria do sexo feminino (86,8%). Obtiveram um escore médio de QVT de 59,84, o que representa uma posição de satisfação. Já na análise por domínios, o pessoal, psicológico e físico também se encontram na faixa de satisfação, exceto o domínio profissional com escore de 53,44, classificado como neutro. Em relação aos sintomas osteomusculares, o pescoço (55,3%) e a coluna lombar (47,4%) foram as regiões mais acometidas nos últimos 12 meses. **CONCLUSÃO:** Os resultados deste estudo, sinalizam a necessidade de adoção de melhorias nas condições de trabalho, tanto no sentido de repensar as questões que repercutem na QVT quanto no manejo dos problemas musculoesqueléticos.

PALAVRAS-CHAVE: Local de Trabalho. Qualidade de Vida. Doenças Musculosqueléticas. Agentes Comunitários de Saúde.

Introduction

The Community Health Agent (CHA), recently considered a health professional, is fundamental in Primary Care[1], as its work attributes include community guidance and building bonds with users, as well as transmitting health information and mediating the population's access to health services.[2] Its main activities are demographic and sociocultural diagnosis; the detailed record of home visits; community mobilization to participate in public health policies; follow-up of social programs; and carrying out regular home visits to monitor the population in its coverage area in the different stages of life.[2]

Considering the above, in the work environment, the CHA is faced with several challenges, such as the numerous tasks included in their attributions, the demand for productivity by goals, the lack of resources to do their job well, interpersonal conflicts and the conditions inadequate wages, thus implying physical and mental overload.[3,4] In addition, as a result of the COVID-19 pandemic, it was necessary to reorganize the work process of the CHA, both in-home visits and within the scope of the Health Unit, thus generating new overloads.[5]

The CHA's work tasks were affected by restrictions on movement, lockdowns and social distancing, a fact that required adapting to the new reality, often without the use of personal protective equipment and adequate training.[6] In several Brazilian subjects, home visits, one of the CHA's essential activities, have been reduced or suspended.[7] Another aspect observed is that the CHAs were overloaded with demands related to monitoring actions for confirmed and suspected cases of COVID-19, such as organizing an agenda, answering the phone at reference units, and providing assistance via communication applications such as WhatsApp.[8] Making the CHA's cell phone number available to ensure continuity of care for users resulted in decreased privacy and longer working hours.[9]

The CHA routinely already feels overloaded and undervalued in the face of the high demands, the lack of recognition of their efforts both by the community and the management, and the intense emotional involvement with the population.[6] During the pandemic, they were exposed to worse working conditions, a reality that can enhance the process of exhaustion at work and impact the quality of life of these workers.[7]

The Quality of Life at Work (QWL) can be conceptualized as a multidimensional construct that refers to the organizational context favorable to the performance of work activities so that workers feel safe, satisfied, valued, and respected as human beings belonging to the working group.[10] QWL is influenced by elements of the work context, such as conditions, socio-professional relationships, professional recognition, and the link between work and social life.[10-12] In this sense, when most of these factors are evaluated positively, it is considered that there is QWL. On the other hand, when most of these aspects are negative, there is a predominance of discomfort at work, increasing the risk of illness.[10-12]

Furthermore, the way professionals perform tasks or the work conditions they are submitted to can trigger musculoskeletal morbidities.[13] Thus, when the work process is carried out without breaks, with repetitive movements, and incorrect postures, in an uncomfortable environment, it may favor the appearance of musculoskeletal symptoms without a specific clinical cause.[13] Among the work-related diseases, Work-Related Musculoskeletal Disorders (WMSD) stand out, which group disorders of muscles, tendons, synovium, nerves, fascia, and ligaments.[14] In general, they are characterized by the occurrence of several symptoms, concomitant or not, such as pain, paresthesia, heaviness, and fatigue.[14] In the case of Community Health Agents, studies show a high prevalence (93.62%)[15] of musculoskeletal symptoms, mainly pain, in the lumbar spine, neck, shoulders and knees.[16]

Given the above, it is important to look at the living and working conditions of Community Health Agents (CHA), as the production of scientific knowledge is still limited to musculoskeletal symptoms and quality of life. Life at Work (QVT) with the peculiarity of the pandemic scenario in which the present research was developed. In addition, local health managers will be able to use the information from this study as a basis for the development of strategies aimed at promoting the health of these workers. Therefore, this study aimed to describe the sociodemographic characteristics, the level of quality of life at work and the prevalence of musculoskeletal symptoms in CHAs.

Method

This is a cross-sectional study, with convenience sampling, whose participants were the community health agents working in the five Unidades de Saúde da Família – USF (Family Health Units) of the Segundo Distrito Sanitário de Saúde (Second Sanitary Health District) in Maceió – Alagoas. In this respective district, there were 60 CHAs in the National Registry of Health Establishments. The USFs have the support of both the Expanded Family Health and Basic Healthcare Centers (NASF-AB) team and the team of the Multiprofessional Residency Program in Family Health at the Universidade Estadual de Ciências da Saúde de Alagoas – UNCISAL (State University of Health Sciences in Alagoas). This work was approved by the Ethics and Research Committee of the UNCISAL, under CAAE 45295821.2.0000.5011 and opinion number 4.756.282.

Data collection took place in person by a single researcher who initially explained the purpose of the study, the methodological procedures, as well as the safeguarding of the rights and identity of the participants, then the instruments were delivered, to be answered by the CHAs themselves. Data were collected in July 2021, with one week allocated to two health units, varying between one and two trips to each unit, according to the number of questionnaires answered.

The CHAs who were carrying out their activities, who agreed to participate in the study and who signed the Free and Informed Consent Term were included. The exclusion criteria were: being on vacation and/ or away from professional activities and/or having worked at the unit for less than a year.

After being invited and accepted to participate in the research, the CHA answered the variables collection instruments, starting with the sociodemographic profile data through an instrument developed by the researchers that includes the following questions: age, gender, education, state marital status, family income, other professional link, workload, and time working as an ACS. Next, the responses related to QWL and musculoskeletal symptoms were collected.

QWL was assessed with the QWLQ-brief, an abbreviated version consisting of 20 questions selected from the 78 that make up the Quality of Life at Work Questionnaire 78 (QWLQ78).[17] This consists of four questions from the physical/health domain, three from the psychological domain, four from the personal domain and nine from the professional domain.[17] The answer to each question is given on a Likert scale and must be based on the last two weeks, to ensure that the results of the QWL indices correspond to the same period.[17] The analysis of the results of the QWLQ- brief applications are interpreted based on the scores, namely: up to 22.5 - very unsatisfactory; between 22.5 and 45 – unsatisfactory; between 45 and 55 – neutral position; between 55 and 77.5 – satisfactory; and above 77.5 – very satisfactory.[17]

To measure the frequency reports of musculoskeletal symptoms in different anatomical regions: neck, shoulder, elbow, forearm, wrist/hand/finger, dorsal region, lumbar region, hip/thigh, knee, ankle/foot, the Nordic Musculoskeletal Questionnaire (NMQ). The instrument is composed of dichotomous responses, in which "no" indicates comfort and "yes" indicates discomfort, and pain; the respondent must report the occurrence of symptoms in the 12 months and seven days preceding the interview.[18]

Regarding the statistical analysis of the data, the continuous variables of the sociodemographic data were described in mean and standard deviation (SD), while the nominal variables were presented in absolute frequency (n) and relative frequency (%). The nominal dichotomous variables of the QNSO were presented in absolute frequency (n) and relative frequency (%). Both sociodemographic data and QNSO data were tabulated in a Microsoft Office Excel 2016® spreadsheet and analyzed in Statistical Package for the Social Sciences (SPSS) version 24.0. QWLQ-brief data were tabulated and calculated automatically, using a specific calculation tool in Microsoft Excel for Windows®[11] software.

Results

A total of 38 Community Health Agents were studied, corresponding to 63% of the 60 initially eligible individuals. Of the individuals contacted, there was no refusal, the losses were due to not being present on the day of collection, due to vacations and absences due to signs and symptoms or risk factors related to COVID-19. Most were female (86.8%), with a mean age of 46.3 ± 9.83 years. Regarding education, 9 (23.7%) workers completed high school, 12 (31.6%) higher education and 17 (44.7%) have a specialization degree. All participants in this research have a workload of 40 hours per week, whose average working time as an ACS was 17.27 ± 5.97 years, with most workers, 33 (86.8%), having no other professional employment.

Regarding the quality of life at work, it was observed that the ACS had an average QWL score of 59.84, which represents a position of satisfaction. In the analysis of the QWLQ-brief domains, most were in the satisfactory range, except for the professional domain with a score of 53.44, classified as neutral (Figure 1).

Figure 1. ACS domain and QVT mean scores. Maceió – AL, 2021
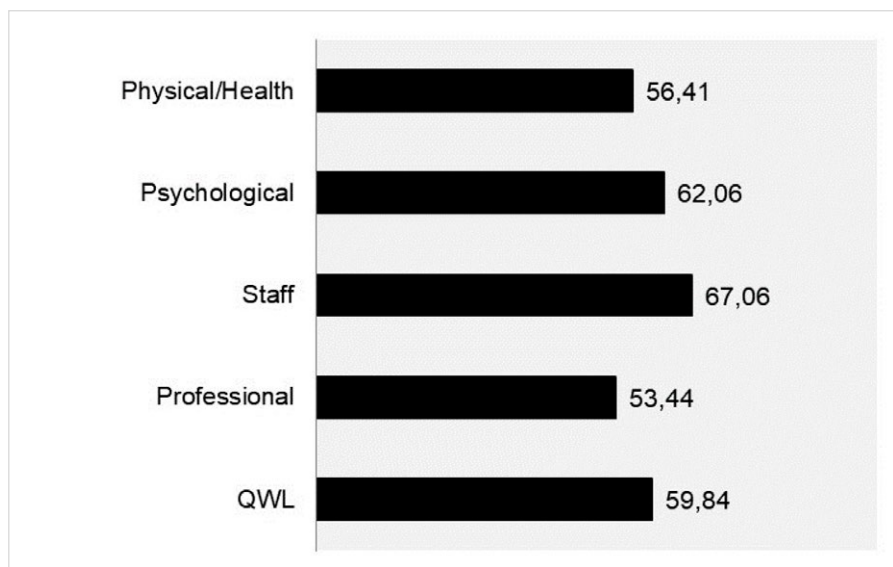
Source: the authors (2021).

Regarding musculoskeletal symptoms, the most affected anatomical regions in the last 12 months were: the neck (55.3%), lumbar spine (47.4%), knees (42.1%) and shoulders (39.5%) as shown in Table 1. Regarding absenteeism, pain in the neck, back, lumbar spine and knees accounted for 71% of cases (Table 1). Furthermore, it is observed that the regions affected by pain in the last 7 days were the shoulders (42.1%), followed by the neck, wrist/hand and lumbar spine, with a frequency of 39.5% each (Table 1).

Table 1. Prevalence of musculoskeletal symptoms and CHA absenteeism. Maceió – AL, 2021

	symptoms in last 12 months		absenteeism in last 12 months		symptoms in last 7 days	
	At the	%	At the	%	At the	%
Neck	21	55.3	7	18.4	15	39.5
Shoulder	15	39.5	3	7.9	16	42.1
Elbow	7	18.4	3	7.9	7	18.4
fist/hand	13	34.2	3	7.9	15	39.5
Dorsal Column	13	34.2	7	18.4	10	26.3
lumbar spine	18	47.4	7	18.4	15	39.5
hips and thighs	7	18.4	3	7.9	7	18, 4
knees	16	42.1	6	15.8	11	28.8
ankles and feet	11	28.8	4	10.5	9	23.7

Data expressed in absolute frequency (N) and relative frequency (%).
Source: the authors (2021).

Discussion

This study revealed a sample consisting mostly of middle-aged women, with a satisfactory Quality of Life at Work (QWL) and occurrences of musculoskeletal symptoms, mainly in the neck and lumbar spine. The prevalence of women in the CHA profession is like other surveys carried out with the universe of community health agents, in which there was also a predominance of women.[15,16,19] In the study by Paula et al.[15] carried out about the quality of life and musculoskeletal symptoms in CHAs, it was observed that 89% of the participants were female. Feminization in the CHA profession reflects the social and cultural construction of the profession linked to the figure of the female caregiver, thus associating the image of the CHA profession with the act of caring, guiding, and ensuring the physical and social well-being of the entire family.[19,20] However, when seen as an eminently feminine profession, in the patriarchal model that operates in today's society, it reverberates in the devaluation of this profession.[20]

Regarding the overall level of Quality of Life at Work, the participants in this study consider themselves satisfied, as they obtained an average score of 59.84. Thus, it can be said that the CHAs have a satisfactory QWL since satisfactory QWL indices start from 55 and go up to 77 points.[17] Some authors point out that QWL comes from experiences of well-being at work, institutional and collective recognition, the possibility of professional growth and respect for individual characteristics.[10-12]

On the other hand, the QWLQ-brief professional domain was classified as neutral, that is, it obtained the lowest score (53.44) compared to the other domains. It is worth mentioning that no studies were found in the literature that applied the QWLQ-brief to assess the QWL of CHAs, limiting comparisons with other surveys. Thus, in studies that used this instrument with professionals from the administrative sector, it was found that the professional domain also obtained the lowest QWL index.[19,20]

In the professional domain, satisfaction with the freedom to create new things, equal treatment, training offered by the organization, participation in decision-making and the level of responsibility at work are evaluated. Thus, the neutral position in this domain in the public and study context can raise some reflections. The first concerns the lack of training and professional education for CHAs, including during the pandemic.[5,22] The second involves the relationship between CHAs and managers, where this category feels subordinated, subjugated and with little autonomy in participating in decision-making.[4] Santos, Souza and Freitas4 show that the lack of professional recognition by the health team and management causes feelings of demotivation, devaluation and lack of commitment to the work.[4]

In this way, the lower results of the professional domain in the public CHA may be due to the participatory management in the SUS not yet being a constant practice in the USF studied, since this collective management model foresees the inclusion of workers, users and managers in the production and management of care and work processes.[22] This indicates the need for managers to pay attention to factors related to work organization and worker appreciation, that is, aspects that do not depend exclusively on individual changes by professionals to improve QWL.[4,22]

The personal domain, on the other hand, obtained the best QVT score (67.43), reaching a satisfactory classification. The facets evaluated in this domain concern the feeling of professional achievement, the relationship with superiors and/or subordinates and respect among co-workers.[17] According to Cheremeta et al.[17], the personal domain of the QWLQ-brief is close to the aspects evaluated in the domain of social relations of the World Health Organization Quality of Life (WHOQOL-100), an instrument that assesses the quality of life.

Thus, the satisfactory QWL index in the personal domain of the CHAs in the present study is similar to the satisfaction evaluations obtained in the domain of social relationships found in other studies with this public.[17,23] According to the study by Ursine et al.[23], the mean score for the social relationships' domain was 71.5, with responses ranging from satisfied to very satisfied. This is because the essence of the role of the CHA is in the relationships and bonds established both in the community and in the team, that is, the performance of their attributions requires good interpersonal relationship skills, as they live and work with people.[19,23]

In the field of occupational health of health professionals, it is important to reflect on some notes discussed in other studies.[10,12] It has been observed that a high quality of life in the work environment contributes positively to the provision of health care to individuals. However, low quality of life can have negative consequences such as unsatisfactory performance, low involvement in tasks, absenteeism, and inadequate assistance.[10,12] This indicates that the work context, in addition to causing harm to the health worker itself, can have repercussions on the people cared for by these professionals.

Regarding the presence of musculoskeletal symptoms in the ACS of this study, the neck (55.3%) and the lumbar spine (47.4%) were the most affected regions in the last 12 months. In the last 7 days, they reported musculoskeletal complaints mainly in the shoulders (42.1%). In this regard, the predominance of pain in the lumbar region, neck and shoulders reported by the CHAs is in line with findings from other studies.[15,16] Sumaya et al.[16], observed that in the last year, the main regions mentioned by CHA professionals were the lumbar spine (65.9%), the neck (61.4%) and the shoulders (47.7%).

The CHA's work process has had consequences for their health.[4] In this context, musculoskeletal problems in these professionals may be related to their work activities, in which they are subjected to excessive workloads, without rest breaks, performing repetitive movements and maintaining postures for prolonged periods, such as when sitting or during long walks.[3,4] Cordioli et al.[13] states that the presence of musculoskeletal symptoms can influence the quality of life of Primary Health Care workers.

It is worth mentioning that the context of the pandemic, in which this research was carried out, may have been a contributing factor to the appearance of musculoskeletal symptoms and repercussions on QWL, since the CHAs were facing a health emergency, requiring a reorganization of their way of work, however, with fragile conditions such as insufficient Personal Protective Equipment (PPE) and lack of training to be qualified and resolutely follow the protocols indicated in the pandemic situation.[5,6]

It is necessary to think about health promotion and disease prevention strategies, in the different realities of the CHA work exercise.[18,24] According to Pinheiro et al.[24], as a way of improving quality of life in the work environment, the CHAs focused on mental and physical health care, through follow-up with specific professionals, relaxation techniques, physical exercises, and leisure, among others.

From this perspective, as provided for in the Política Nacional de Saúde do Trabalhador e da Trabalhadora (National Policy on Workers' Health), an intersectoral action is necessary to obtain positive impacts in the intervention in the determinants of health and work conditions.[14] Therefore, it is necessary to broaden the understanding that workers' health must be conceived as a transversal action, in which

the relationship between health and work must be identified at different levels of the care network.[14] In Primary Care, as the CHA's workspace, one should seek to establish a solidary and resolving network of practices and knowledge production to build spaces that promote the health of the worker, of the professionals who work at this level, to also have conditions to take care of the other.[14,24]

The study has limitations typical of a cross-sectional descriptive study design, as it only aims to describe the variables, and not establish an association between cause and effect. In addition, the fact that this study was carried out with the CHA of a single health district with convenience sampling does not allow the generalization of the data. Self-administered questionnaires also have a disadvantage, as participants may not answer all questions, causing data loss. However, it is worth emphasizing that this study is a pioneer in terms of assessing the Quality of Life at Work in CHA, considering that the studies found in the literature evaluate the construct quality of life, which differs from Quality of Life at Work.

Conclusion

In this study, the quality of life at work was classified as satisfactory by the CHA workers, except for the professional domain, which obtained a neutral evaluation. In addition, the CHA reported musculoskeletal symptoms mainly in the neck, lumbar spine and shoulders. Therefore, these results indicate the need to adopt improvements in working conditions, both in the sense of rethinking the issues that affect QWL and in the management of musculoskeletal problems. Therefore, managers must reflect and seek to make the work environment a place in which CHAs feel valued, involved in decision-making and constant permanent education, as well as adopt measures aimed at reducing work-related disorders, through a safe, comfortable, and healthy space.

Authors' contributions

Souza DRA contributed to the design and preparation of the study, analysis and interpretation of data and writing and final review of the article. Carvalho VL worked on the design and preparation of the study, critical analysis and final revision of the article. Souza CS contributed to the analysis interpretation and writing of the data.

Conflicts of interest

No financial, legal, or political conflicts involving third parties (government, private companies and foundations, etc.) have been declared for any aspect of the submitted work (including, but not limited to, grants and funding, participation in advisory boards, study design, manuscript preparation, statistical analysis, etc.).

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