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RESEARCH ARTICLE

Psychosocial status and job satisfaction among community health workers in Batangas, Philippines

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ABSTRACT

Background: Community Health Workers (CHWs) play a vital role in addressing community healthcare needs, yet little is known about their psychosocial status and job satisfaction. This study aimed to describe the psychosocial status and job satisfaction of CHWs, and examine the factors associated with their job satisfaction.

Methodology: A cross-sectional study was conducted among 440 CHWs aged 25-60 years working in urban and rural areas of Batangas, Philippines. Linear regression models were used to examine the association between psychosocial factors and job satisfaction. Other factors associated with job satisfaction were also examined.

Results: Despite 90.0% of CHWs reporting high perceived stress and 52.1% experiencing high depressive symptoms, they demonstrated relatively high job satisfaction (mean [standard deviation]= 80.05 [17.56]; range= 0-100) and high perceived social support (mean [standard deviation]= 25.09 [2.93]; range= 10-30). Among psychosocial factors, only perceived social support was associated with job satisfaction (unstandardized beta [B] 0.93; 95% confidence interval [CI] 0.44, 1.41). Other factors associated with job satisfaction include fixed working hours (B 4.71; 95% CI 0.49, 8.94), work amenities (B 7.37; 95% CI 0.03, 14.72), ≥21 years of work experience (B 5.64; 95% CI 0.35, 10.93), and working in rural areas (B 5.88; 95% CI 2.77, 8.99).

Conclusions: Psychological factors such as perceived stress and depressive symptoms were not found to be associated with job satisfaction among CHWs. However, factors such as greater perceived social support, fixed working hours, work amenities, longer work experience, and working in rural areas were identified as contributors to higher levels of job satisfaction among CHWs.

Introduction

Job satisfaction is a pleasant emotional state resulting from appraisals of an individual's work. It involves emotional reactions and attitudes toward the job. According to Locke's effect theory (1976), satisfaction is linked to the gap between what a person wants from their job and what they have at work [1]. In healthcare, the satisfaction of healthcare workers is crucial because it connects to the quality of care they provide to their patients. Several studies explore how healthcare workers feel about their jobs. For instance, some studies deal with the relationship between healthcare workers and their supervisors [2], and others deal with their burnout and stress experiences towards their flexible work [3]. Health workers' job satisfaction may be influenced by several factors, including adequate compensation, organizational support, interpersonal relationships with colleagues and supervisors, working conditions, and other psychosocial factors.

Psychosocial factors play a role in distinguishing individuals based on their social environment and can impact their mental and physical health [4]. This includes perceived stress, depressive symptoms, and social support at work [5,6]. In China, work stress is intricately linked to job satisfaction, with higher stress reported among dissatisfied healthcare workers [7]. Moreover, in Brazil, depressive symptoms were identified as a predictor for professional exhaustion [8], while social support was found to alleviate work pressure and enhance job satisfaction among healthcare workers [9]. The mental well-being of healthcare workers impacts both their personal lives and ability to provide quality care. High stress and depressive symptoms can reduce performance, lower productivity, and affect patient outcomes. Addressing these psychosocial factors is crucial for a healthier workforce and improved healthcare quality.

Working conditions may also play a crucial role in shaping job satisfaction. This encompasses various aspects of the work environment, such as commuting arrangements, working hours, and provided amenities. However, poor working conditions can limit employees from highlighting their full potential and capabilities, underscoring the importance for organizations taking the work environment seriously to enhance commitment, motivation, and overall productivity. Working hours are a key

component, influencing the duration of paid work and the dynamics within the workplace. A study in China showed that longer commuting hours are associated with poorer self-rated health, depression, and reduced sleep [10]. In Pakistan, positive effects on employee performance are observed in work environments where employees are involved in decision-making, experience lighter workloads, and benefit from supportive management [11]. Additional research is necessary to understand better how working conditions influence job satisfaction within the healthcare system.

In the Philippines, CHW programs are implemented at the barangay level. A barangay is the smallest administrative district in the country, representing the most local level of government. Barangay Health Workers (BHWs), also referred to as CHWs, work alongside nurses, midwives, and barangay nutrition

Highlights

- Community health workers (CHWs) have defined roles in the community, but the factors influencing their job satisfaction, particularly psychosocial aspects, remain understudied.
- Among psychosocial factors, only perceived social support is associated with job satisfaction among CHWs.
- Fixed working hours, work amenities, longer work experience, and working in rural areas are associated with job satisfaction among CHWs.
- Implementing guidelines and policies that promote social support and enhance the work environment in primary health centers is recommended.

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scholars as key members of the healthcare workforce in every community. CHWs deliver healthcare services, often working with limited supplies and equipment to meet their patients' needs. Additionally, local politics play a significant role as Filipino CHWs often feel compelled to align themselves politically with local leaders to secure and maintain their job positions [12]. This dynamic contributes to various mental health concerns among CHWs, a situation prevalent even before the Coronavirus disease (COVID-19) pandemic [13]. During the pandemic, CHWs have emerged as frontline workers, facing added pressure and stress in their daily responsibilities, impacting their job performance and satisfaction.

Understanding the factors affecting job satisfaction among CHWs is limited, particularly in resource-constrained settings like the Philippines. We propose that individual and psychosocial factors, such as mental well-being and relationships with supervisors and colleagues, impact CHWs' job satisfaction. This study aimed to assess the psychosocial status and job satisfaction of CHWs in Batangas, Philippines. Specifically, it examines the association between psychosocial factors (perceived stress, depressive symptoms, perceived social support) and CHWs' job satisfaction. The findings could provide valuable insights for designing tailored policies and programs to meet CHWs' needs.

Methodology

2.1 Study design

We conducted a cross-sectional study to examine the psychosocial status and job satisfaction among CHWs.

2.2 Study setting

The study was conducted in Batangas, a densely populated province located in Region IV-A, occupying the central section of Luzon in the Philippines. As of the 2020 census, Batangas has a population of 2,908,494, representing 17.9% of the total population of Region IV-A (CALABARZON) and 2.67% of the entire Philippines population [14]. This makes Batangas the 7th most populated province in the country. Batangas has a total of 51 health facilities, including Rural Health Units, City Health Offices, and Municipal Health Offices [15]. Healthcare professionals, such as nurses, radiologic technologists, and barangay health workers in Batangas province, have been reported to experience psychological distress, anxiety, and burnout [16-18], making them a key population for study among Filipinos. We collected data from both urban and rural areas, following the Philippine Standard Geographic Code [19] (Supplementary Figure 1).

2.3 Study population

We included CHWs based on the following selection criteria: Filipino citizen, male or female, age 25 to 60 years, and have at least one year of professional experience as a CHW. We excluded those participants who have less than a year of working experience as CHWs, are over 60 years, work as part-time CHWs, and withdraw during the data collection.

We based our sample size on a study conducted in India on the job satisfaction of healthcare providers [20]. Using OpenEpi (version 3.01) with parameters including a 95% confidence interval, 80% statistical power, odds ratio of 3.0, and assuming a 10.0% dropout rate [21], we calculated a minimum sample size of 440. The sample was divided into two geographic areas, urban and rural, with an equal number of 220 participants selected for each area. This approach ensured a comprehensive representation of both urban and rural contexts in this study.

2.4 Recruitment procedure

We used multi-stage stratified random sampling for our recruitment procedure (Supplementary Figure 2). First, we grouped the province of Batangas into rural and urban areas. Next, we randomly selected four representatives from each group. We selected Batangas City, Lipa, Santo Tomas, and Tanauan for urban areas, while Balayan, Calaca, Lemery, and Rosario were for rural areas. We conducted proportional allocation to recruit CHWs since each area has a different number of barangays. We secured permits and letters of support from each local government unit. We designated a contact person for each site, who provided a complete list of

CHWs currently working in that area. From this list, we randomly selected CHWs to complete the questionnaires. The contact persons were also responsible for assisting in facilitating the data collection process. A pretesting was conducted before the actual survey to ensure the reliability and validity of the questionnaires [22]. During this phase, we distributed self-administered questionnaires to 20 CHWs.

2.5 Variable and assessment tools

2.5.1 Outcome: Job satisfaction

To assess the overall job satisfaction of CHWs, we used the Satisfaction of Employees in Health Care (SEHC) scale. The SEHC scale measures three dimensions, including the relationships with management and supervisors, job content, and relationships with coworkers. It consists of 20 items, but for this study, only the first 18 items were used to provide a comprehensive and diverse range of participant responses. The last two items (items 19 and 20) were global staff satisfaction measures and can be treated independently as outcome measures. Sample statements include "The management of this organization is supportive of me," "I am satisfied with my chances for promotion," and "I feel I can easily communicate with members from all levels of this organization." CHWs rated each item on a 4-point Likert scale, where 1 indicated "Strongly Disagree" and 4 indicated "Strongly Agree." We rescaled responses (0-100) to ensure comparability across all items. The total score was calculated by taking the mean of the first 18 items, with higher scores indicated higher levels of job satisfaction [23]. The Cronbach's alpha for this study was 0.95, indicating high internal consistency and reliability.

2.5.2 Exposure: Psychosocial status

In this study, we defined psychosocial status using three variables: perceived stress, depressive symptoms, and perceived social support.

2.5.2.1 Perceived stress scale

The Perceived Stress Scale (PSS-10) was used to assess the perceived stress of CHWs. Developed in 1983 by Cohen *et al.*, this stress assessment tool comprises a 10-item survey. The subscale scores were calculated by adding the six negatively worded items (Items 1, 2, 3, 6, 9, and 10) for Factor 1 ("Negative") and the four positively worded items (Items 4, 5, 7, and 8) for Factor 2 ("Positive"). Sample questions were asked from the CHWs such as, "In the last month, how often have you been upset because of something that happened unexpectedly?" and "In the last month, how often have you felt that things were going your way?" Individual scores on the PSS can range from 0 to 40, with higher scores indicating higher perceived stress [24]. The classification suggests low stress for scores ranging from 0 to 13, and moderate to high stress for scores ranging from 14 to 40. The Cronbach's alpha for this study was 0.72, indicating acceptable internal consistency and reliability.

2.5.2.2 Depressive symptoms

To assess the depressive symptoms of CHWs, we used the Center for Epidemiologic Studies Depression Scale (CES-D), a 20-item statement. Sample statements include "I was bothered by things that usually don't bother me" and "I had trouble keeping my mind on what I was doing". Response options range from 0 to 3 for each item (0 = Rarely or None of the Time, 1 = Some or Little of the Time, 2 = Moderately or Much of the time, 3 = Most or Almost All the Time). The CES-D gives a score of 0, 1, 2, or 3 to a response based on whether the item is worded positively or negatively [25]. Questions 4, 8, 12, and 16 were reversed coded. The total score, calculated from the 20 questions, ranges from 0 to 60, with a score of 16 or higher indicating a high likelihood of depressive symptoms. The Cronbach's alpha for this study was 0.88, reflecting high internal consistency and reliability.

2.5.2.3 Perceived social support

To assess CHW's perceived social support, we used the Duke Social Support Index (DSSI-10) [26]. This scale comprises 10 items scale and measures subscales related to social support, including social support satisfaction and social interaction. The social interaction sub-scale was calculated as the sum of re-coded scores for items 1–4, while the social support satisfaction subscale was computed by adding the codes for items 5–10 [27]. A sample social interaction question was "Other than members of your family, how many persons in your local area do you feel you can depend

on or feel very close to?" Sample social support satisfaction was 'Do you feel you have a definite role (place) in your family and among your friends?' Scores are calculated as the sum of these two subscales, resulting in a possible score ranging from 10 to 30. The Cronbach's alpha for this study was 0.71, indicating satisfactory internal consistency and reliability.

2.5.3 Covariates: Sociodemographic characteristics

This study considered several sociodemographic variables, which include age, sex, level of education, marital status, years of working experience, monthly income, and geographic area. CHWs were asked to provide their actual age. Based on their educational backgrounds, we categorized them into two groups: high school and below and college. Marital status was grouped into committed relationships (married) and non-committed relationships (single, separated, and widowed). For years of experience, CHWs provided the actual number of years employed, and these were grouped into the following ranges: 1 to 10, 11 to 20, and 21 years and above. Monthly income was reported and grouped into ≤ 5000 and > 5001 PHP. The geographic area was determined based on the respondents' selection of either urban or rural areas.

2.5.4 Confounders: Working conditions

The researchers developed a questionnaire to assess working conditions, including questions on commuting arrangements, working hours, and work amenities. The questions were adapted from the International Labour Organization [27] and a previous study examining the impact of the physical environment on employee performance [28]. CHWs were asked about their satisfaction with their commuting situation. Given the importance of working hours in overall working conditions, CHWs were also inquired about their work schedule and whether their hours were fixed according to their contract terms. Additionally, we inquired about the resources and conveniences that make CHWs comfortable at work. CHWs responded to a four-point Likert scale, with choices ranging from strongly disagree (1) to strongly agree (4). We categorized CHWs who responded 'agree/strongly agree' as experiencing favorable working conditions, while those who answered 'disagree/strongly disagree' were classified as not having favorable working conditions.

2.6 Data collection

We collected data after obtaining ethics approval from the College of Pharmacy Ethics Review Committee (CERC) in February 2023 and securing permissions from the local government units. We conducted face-to-face surveys to carry out the self-administered questionnaires, including the SEHC, PSS-10, CES-D, DSSI-10, and developed survey questionnaires on working conditions. We collected data in selected urban and rural areas in Batangas from February to March 2023. We provided CHWs with an information sheet and explained the purpose of the study. While adhering to ethical guidelines and standards, we secured written informed consent from those who voluntarily participated, ensuring their confidentiality and privacy.

2.6.1 Translation and validation of survey questionnaires

The instruments used in this study underwent translation from English to Filipino. We adhered to the WHO guidelines for translation [29], employing both forward and backward translation processes. In addition, this study underwent face and content validity testing. Subject matter experts, such as a Registered Pharmacist, a Doctor of Philosophy (PhD) in Education, a Registered Psychometrician, and a Guidance Counselor, validated the survey questionnaires.

2.7 Analysis

We performed descriptive statistics to describe the characteristics of CHWs and the measured variables. We presented continuous variables using the mean, standard deviation, and range, while we expressed the categorical variables in percentages. Additionally, we conducted simple and multiple linear regression analyses to examine the association between psychosocial factors and job satisfaction [30]. We assessed for multicollinearity, and variance inflation factors were less than 5, indicating the absence of multicollinearity among the variables. We used STATA 13.0 (StataCorp LP, College Station, TX, USA) in all analyses, and the p-value was set at less than 0.05 (two-tailed).

2.8 Ethical considerations

This study was approved by the CERC board (2022-02-PHA-19). We ensured the confidentiality and privacy of CHWs by excluding personally identifiable information. In compliance with Republic Act 10173, the Philippine Data Privacy Law, all gathered data was kept confidential and accessible only to the researchers. The data analyzed was based on anonymized information. Participation of CHWs was voluntary, and they had the right to withdraw without facing harm or penalty. Written informed consent was obtained from CHWs before conducting the survey. The study obtained necessary approvals, including a certificate of face and content validity, and translation validation from experts.

Results

3.1 Characteristics of community health workers

A total of 440 CHWs agreed to participate in this study. Table 1 presents the socio-demographic characteristics of CHWs. Their age ranged from 25-60 years, with a mean age of 47.68 [standard deviation (SD) 8.50]. Of the 440 CHWs, 425 (96.6%) were female. The majority had 1-10 years of work experience (62.9%), followed by 11-20 years (26.1%). A significant portion of CHWs were in committed relationships (73.6%), had high school and elementary education (69.8%), and reported a monthly income of Php 5000 and below (84.1%). Notably, an equal number of CHWs were from urban and rural areas.

In terms of psychosocial factors, a significant majority of CHWs (90.0%) reported experiencing high perceived stress. Additionally, just over half of CHWs (52.1%) were identified as having a higher risk for depressive symptoms. Regarding perceived social support, CHWs had a mean score of 25.09 (SD 2.93) out of 30 points. While there is no specific cut-off score for perceived social support, the scores obtained suggest a higher level of perceived social support.

As for working conditions, the majority of CHWs reported favorable commuting arrangements (89.1%), fixed working hours (80.5%), and access to work amenities (93.4%).

3.2 Factors associated with job satisfaction among CHWs

Table 2 shows the factors associated with job satisfaction of CHWs. Among the psychosocial factors considered, only perceived social support was associated with job satisfaction (B 0.93; 95% CI 0.44, 1.41). The unstandardized coefficient indicates that for every one-unit increase in perceived social support, job satisfaction increases by 0.93 units.

Regarding working conditions, CHWs with fixed working hours (B 4.71; 95% CI 0.49, 8.94) and those with access to work amenities (B 7.37; 95% CI 0.03, 14.72) reported higher job satisfaction compared to those with irregular work hours and lacking amenities, respectively.

In terms of sociodemographic characteristics, CHWs with 21 years and above work experience exhibited greater job satisfaction (B 5.64; 95% CI 0.35, 10.93) than those with 1-10 years of work experience. Additionally, working in rural areas was associated with higher job satisfaction (B 5.88; 95% CI 2.77, 8.99) among CHWs compared to those assigned in urban areas.

Discussion

In this study, perceived stress and depressive symptoms are not associated with job satisfaction among CHWs. Despite a majority of them experiencing high perceived stress and over half reporting high levels of depressive symptoms, their overall job satisfaction and perceived social support remain notably high. Among the psychosocial factors, only perceived social support was associated with job satisfaction. Working conditions, including fixed working hours and amenities, are associated with the CHW's job satisfaction. In addition, CHWs with over 21 years of experience and those working in rural areas were more satisfied with their job. These findings underscore the importance of CHWs perceiving their work as having a solid support system, being content with their work hours, experiencing physical comfort in their workplace, having extensive work experience, and being stationed in rural areas—all significantly linked to job satisfaction.

Table 1. Characteristics of community health workers (n = 440)

Characteristics	n (%		
Age, mean (SD); range: 25-60 years	47.68 (8.50)		
Sex			
Male	15 (3.		
Female	425 (96.		
Work experience (years)			
1-10	277 (62.		
11-20	115 (26.		
21 and above	48 (10.		
Marital status			
Non-committed relationship	116 (26.		
Committed relationship	324 (73.		
Level of education			
Highschool and below	307 (69.		
College	133 (30.		
Monthly income (PHP) ¹			
Below 2500	191 (43.		
2500-5000	179 (40.		
Above 5000	70 (15.		
Geographic area			
Urban	220 (50.		
Rural	220 (50.		
Perceived stress			
Low	44 (10.		
High	396 (90.		
Depressive symptoms			
Low	211 (48.		
High	229 (52.		
Perceived social support, mean (SD); possible range: 10-30	25.09 (2.93)		
Job satisfaction, mean (SD); possible range: 0-100	80.05 (17.56)		
Working conditions			
Favorable commuting arrangement	392 (89.		
Fixed working hours	354 (80.		
Work amenities	411 (93.		
PHP Philippine peso: SD. Standard Deviation: 156 PHP = 1 USD			

PHP, Philippine peso; SD, Standard Deviation; ¹56 PHP = 1 USD

Table 2. Factors associated with job satisfaction among community health workers (n = 440)

Variables	Unadjusted		Adjusted	
	B (95% Cl)	p-value	B (95% Cl)	p-value
Psychosocial status				
Perceived stress (vs. Low)				
High	-3.11 (-7.59, 1.36)	0.172	-3.82 (-8.40, 0.75)	0.101
Depressive symptoms (vs. Low)				
High	-1.28 (-4.28, 1.72)	0.402	1.02 (-2.09, 4.13)	0.519
Perceived social support	1.16 (0.67, 1.66)	< 0.001	0.93 (0.44, 1.41)	< 0.001
Working conditions				
Favorable commuting arrangement	1.76 (-4.54, 8.07)	0.583	-4.57 (-11.12, 1.97)	0.170
Fixed working hours	8.35 (4.46, 12.24)	< 0.001	4.71 (0.49, 8.94)	0.029
Work amenities	11.66 (18.66, 4.65)	0.001	7.37 (0.03, 14.72)	0.049
Sociodemographic characteristics				
Age	0.07 (-0.11, 0.25)	0.470	-0.05 (-0.27, 0.16)	0.622
Sex (vs. Female)				
Male	7.93 (-0.57, 16.44)	0.067	5.58 (-2.52, 13.67)	0.177
Working experience (years) (vs. 1-10)				
11-20	-1.12 (-4.71, 2.48)	0.542	-0.45 (-4.04, 3.13)	0.804
21 and above	7.00 (1.82, 12.18)	0.008	5.64 (0.35, 10.93)	0.037
Marital status (vs. Committed relationship)				
Non-committed relationship	1.11 (-2.18, 4.39)	0.509	1.03 (-2.34, 4.40)	0.547
Level of education (vs. Highschool and below)				
College	2.16 (-0.95, 5.28)	0.172	2.13 (-0.99, 5.24)	0.181
Monthly income (PHP) (vs. 5000 and below) ¹				
5001 and above	5.41 (-7.48, 2.10)	0.006	3.98 (-0.41, 8.36)	0.075
Geographic area (vs. Urban)				
Rural	5.67 (2.72, 8.63)	< 0.001	5.88 (2.77, 8.99)	< 0.001

B, unstandardized beta; CI, confidence interval; 156 PHP = 1 USD

In Batangas City, CHWs demonstrated high job satisfaction despite a significant portion reporting elevated perceived stress and depressive symptoms. Only perceived social support, not psychological factors, was associated with CHWs' job satisfaction, prompting further investigation. Job satisfaction among Filipino CHWs is notably influenced by perceived social support, particularly in their relationships with colleagues, supervisors, friends, and family. This reflects the cultural nature of Filipinos, who are known for their strong community connections, close family ties, and hospitality, all of

which contribute to the support they receive in their work. Our findings align with a cross-sectional study in Portugal, which emphasized the importance of empowerment in the workplace. Social support from peers and superiors was identified as a key determinant of job satisfaction in healthcare [31]. Establishing strong relationships and effective communication within the health facility is crucial for improving task efficiency and motivating the workforce to serve the community effectively.

The job satisfaction of CHWs is significantly influenced by working conditions, particularly the positive association with fixed working hours and work amenities. When CHWs align their work hours with their schedule and comfortably carry out duties in their designated areas, there is a notable increase in job satisfaction, facilitating enhanced task completion and ensuring a safe and efficient work environment. This mirrors findings from a post-COVID-19 study, emphasizing the substantial impact of working conditions, notably working hours, on healthcare workers' job satisfaction [32]. A parallel exploration in Kenya, focusing on work amenities and job satisfaction, aimed to bolster the recruitment and retention of healthcare professionals [33]. Recognizing the individualized nature of working conditions for each professional underscores their direct influence on job performance. This study implies the significance of workplace comfort and fixed working hours, contributing to heightened job satisfaction among CHWs.

Among CHWs, those with 21 years or more of experience demonstrated significantly higher job satisfaction than those with 10 years or less. This suggests that CHWs with longer tenure in their respective areas are more likely to feel content and comfortable with their work, having established familiarity and stability in both their roles and work environment over the years. This observation aligns with Herzberg's Two-Factor theory, indicating that extended work experience mitigates dissatisfaction and fosters familiarity and expertise in their field, leading to increased job satisfaction [34]. A cross-sectional study in Indonesia supports the positive association between more extended work experience and job satisfaction, emphasizing the impact of years of service on workplace performance and job satisfaction [35]. For CHWs with over 21 years of experience, their expertise, familiarity, sense of accomplishment, and mastery contribute to heightened job satisfaction, reflecting a sustained commitment to serving their community.

In this study, CHWs were categorized based on their assigned locations into rural and urban areas, significantly impacting job satisfaction. Notably, CHWs in rural areas showed higher job satisfaction than their urban counterparts. This difference can be attributed to several contextual, social, and environmental factors. Rural areas typically have fewer healthcare resources and greater health challenges, which may give CHWs a stronger sense of purpose, as they are directly helping underserved communities. Additionally, rural CHWs often work in smaller, tight-knit communities, fostering stronger social connections that contribute to job satisfaction. In contrast, urban CHWs serve larger, more diverse populations, which can result in less personal connection and recognition, potentially lowering job satisfaction. However, a study in Serbia found that urban health workers were more motivated and satisfied due to job security, managerial support, and professional supervision [36]. The positive association between job satisfaction and rural work in this study suggests the need for further research to explore the specific factors influencing job satisfaction in rural versus urban settings in the Philippine context.

The study has produced significant findings and valuable insights, but it is crucial to acknowledge its limitations. First, psychosocial status was limited to perceived stress, depressive symptoms, and perceived social support. In future research, we recommend exploring additional psychosocial factors, such as burnout, coping, and resilience. Second, the lack of a validated tool for assessing working conditions may limit the study's reliability, making it difficult to compare findings with those from other studies. However, we addressed this limitation by conducting face validity testing with subject matter experts before using the self-made tool. Third, the researcher-CHW relationship may have influenced responses, as some CHWs might have felt uncomfortable answering certain questions. For example, questions about personal experiences could lead to false responses due to reluctance or fear of judgment, especially when sharing with individuals they do not trust. Additionally, social desirability bias may have been present, as the survey was conducted within their workplace, which could have made CHWs hesitant to provide truthful answers, even though the survey was conducted in a private room. To mitigate this, we built rapport with CHWs and encouraged them to share their work experiences before completing the survey. We assured them that their responses would improve their work environment and not affect their job security, emphasizing that all answers were anonymous and confidential. Finally, the lack of a comprehensive CHW list in different regions required us to use proportional allocation to recruit CHWs from both rural and urban areas, ensuring representativeness. Despite these limitations, the study successfully engaged CHWs, and researchers were able to build trust. Moreover, we adapted scales from validated measurements, conducted face validity testing with subject matter experts, and pretesting showed good reliability.

Conclusion

The study shows that CHWs experience high levels of depressive symptoms and perceived stress while also reporting elevated perceived social support and job satisfaction. Factors associated with job satisfaction include greater perceived social support, fixed working hours, satisfactory work amenities, extended work experience, and rural work assignments. Therefore, policies and programs should prioritize enhancing social support, improving working conditions, and implementing strategies to retain CHWs. Further research is necessary to compare rural and urban health centers and gain a more subjective understanding of the psychosocial factors influencing the job satisfaction of CHWs. Other areas with similar resource settings could benefit from the findings of this study.

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Conflict of Interest

The authors have no conflicts of interest to declare.

References

- Kumar P, Khan A, Inder D, Sharma N. (2013) Job satisfaction of primary health-care providers (public sector) in urban setting. J Family Med Prim Care Jul;2(3):227-33. doi:10.4103/2249-4863.120718
- Locke EA. (1976) The Nature and Causes of Job Satisfaction. Handbook of Industrial and Organizational Psychology. Chic. RandMc Narlly. 2:360–580.
- 3. IBM Smarter Workforce Institute. (2017) The Employee Experience of Healthcare Workers: A study of the impact and drivers of a more human workplace. IBM Corporation ("IBM") and Globoforce Limited ("Globoforce").
- 4. Thomas K, Nilsson E, Festin K, et al. (2020) Associations of Psychosocial Factors with Multiple Health Behaviors: A Population-Based Study of Middle-Aged Men and Women. International Journal of Environmental Research and Public Health. Feb; 17(4): 1239. PubMed PMID: 32075162. eng.
- Goetz K, Berger S, Gavartina A, Zaroti S, Szecsenyi J. (2015) How psychosocial factors affect well-being of practice assistants at work in general medical care? – a questionnaire survey. BMC family practice, 16, 166. doi: 10.1186/s12875-015-0366-y
- Feng D, Wang Q, Huang S, Lang X, Ding F, Wang W. (2022) The effect of perceived stress, family companionship, and mental health on the subjective happiness of Chinese healthcare workers:
 A mixed research method. Sep 23;19(19):12058. PubMed PMID: 36231357. eng.
- Li l, Hu H, Zhou H, et al. (2014) Work stress, work motivation and their effects on job satisfaction in community health workers: a cross-sectional survey in China. doi:10.1136/bmjopen-2014-004897
- de Oleivera A, Silva M, Galvão T, Lopes L. (2018) The relationship between job satisfaction, burnout syndrome and depressive symptoms. Medicine, 97(49), e13364. doi: 10.1097/MD.0000000000013364
- Platis, Ch, Reklitis P & Zimeras S. (2015) Relation between Job Satisfaction and Job Performance in Healthcare Services. DOI: 10.1016/j.sbspro.2015.01.1226
- 10. Wang Z, Wu Q & Guo M. (2021) Association between commute

- duration and sickness absence in the context of China: mechanism and heterogeneous effects. Mar 5;9:611162. DOI:10.3389/fpubh.2021.611162
- Raziq A & Maulabakhsh. (2015) Impact of working environment on job satisfaction. DOI:10.1016/S2212-5671(15)00524-9.
- Dodd W, Kipp A, Nicholson B. et al. (2021)Governance of community health worker programs in a decentralized health system: a qualitative study in the Philippines. BMC Health Service Research. doi.org/10.1186/s12913-021-06452-x
- Rillera Marzo R, Villanueva Iii EQ, Chandra U, Htay MNN, Shrestha R, & Shrestha S. Risk perception, mental health impacts and coping strategies during COVID-19 pandemic among Filipino healthcare workers. Journal of Public Health Research. doi.org/10.4081/jphr.2021.2604
- 14. Philippine Statistics Authority. Highlights of the Philippine population census of population and housing (2020 CPH). https://psa.gov.ph/content/highlights-philippine-population-2020-census-population-2010-census-population-and-housing-2020-cph#:~:text=Of%20the%2081%20provinces%2C%20Cavite,million%20population%20mark%20in%202020.
- 15. Phil Atlas. Batangas profile. (2022). https://www.philatlas.com/luzon/r04a/batangas.html
- Kalalo DCM. Burnout and Psychological Capital among Nurses in Selected Hospitals in Batangas City. International Journal of Research Studies in Psychology. DOI: 10.5861/ijrsp.2024.001
- 17. Ganseña MCM, Fidel AKC, Luciano DR, Medrano KCG, Ortiz MAA, Remo KGB, & Dumaoal OSR. Psychological Distress and Burnout of Radiologic Technologists in Batangas Province Amidst the COVID-19 Pandemic. Asia Pacific Journal of Allied Health Sciences. https://research.lpubatangas.edu.ph/wp-content/uploads/2022/09/8-APJAHS-2022-09.pdf
- Mirano JMM. Challenges of barangay health workers in advent of health care emergencies. International Journal of Research Studies in Psychology. https://consortiacademia.org/wpcontent/uploads/2022/p v10i1/P24011 final.pdf
- 19. Philippine Statistics Authority. Philippine Standard Geographic Code (2022) https://psa.gov.ph/classification/psgc/?q=psgc/citimuni/0401000000
- Singh T, Kaur M, Verma M, & Kumar R. Job satisfaction among health care providers: A cross-sectional study in public health facilities of Punjab, India. Journal of family Medicine and Primary. doi: 10.4103/jfmpc.jfmpc 600 19
- 21. OpenEpi (2013). Toolkit shell for developing new applications.
- 22. Gillespie B, Ruel E, Wagner W. (2016). Pretesting and Pilot testing. The practice of survey research. SAGE Publications Inc. https://us.sagepub.com/sites/default/files/upm-assets/68507 book item 68507.pdf

- Chang E, Cohen J, Koethe B, Smith K, & Bir A. (2017). Measuring
 job satisfaction among healthcare staff in the United States: a
 confirmatory factor analysis of the Satisfaction of Employees in
 Health Care (SEHC) survey. International Journal for Quality in
 Health Care, doi:10.1093/intqhc/mzx012
- 24. New Hampshire Department of Administrative Services. (2018) Perceived Stress Scale. https://www.das.nh.gov/wellness/docs/percieved%20stress%20scale.pdf
- Radloff LS. The CES-D scale: a self-report depression scale for research in the general population. Applied Psychological Measurement. 1977:385-401.doi:10.1177/014662167700100306
- Australian Longitudinal Study on Women's Health. (2020) Labour force participation: Duke Social Support Index.
- 27. ALSWH.(2020) Duke Social Support Index.
- Lin Chua SJ, Shah Ali A, & Ling Lim ME. Physical environment comfort impacts on office employee's performance. MATEC Web Conf. 2016:66.doi:10.1051/matecconf/20166600124
- WHO Disability Assessment Schedule (WHODAS 2.0). (2022)Translation and linguistic evaluation protocol and supporting material.
- Aoyama K, Pinto R, Ray JG, Hill A, Scales DC, & Fowler RA. Determining associations and estimating effects with regression models in clinical anesthesia. Anesthesiology. 2020:500-509.doi:10.1097/ALN.000000000003425
- 31. Almeida M, Ramos A & Santos C. (2019) Linking social support with job satisfaction: the role of global empowerment in the workplace. doi: 10.5772/intechopen.89912.
- Barili E, Berotli P, Grembi V & Rattini V. (2022) Job satisfaction among healthcare workers in the aftermath of the COVID-19 pandemic.
- 33. Goetz K, Marx M, Marx I, *et al.* (2015) Working atmosphere and job satisfaction of health care staff in Kenya: an exploratory study.
- 34. Yusoff W, Kian T, Idris M. Herzberg's two factors theory on work motivation: does its work for todays environment, 2(5).2013:18-22.
- 35. Putri IAJ. (2020) The effect of work experience and characteristics of jobs on employee work achievement in the shipping company. Social Sciences and Education Research Review 2020.
- Grujičić M, Jovičić-Bata J, Rađen S, Novaković B. (2018) Motivation and job satisfaction of healthcare professionals in urban and rural areas in the autonomous province of Vojvodina, Serbia. doi:10.2298/MPNS1802033G