ASSESSING COMMUNITY HEALTH WORKERS' PERFORMANCE MOTIVATION

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by

Dennis M. Kirimi

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Dissertation written by

Dennis M. Kirimi

B.S. Public Health, Hiram College, 2013

M.P.H., Epidemiology, Kent State University, 2016

Ph.D.,Kent State University, 2024

Approved by

Sheryl Chatfield, Ph.D., Chair, Doctoral Dissertation Committee

Abbey Eng, Ph.D., Member, Doctoral Dissertation Committee

Pamela Stephenson, Ph.D., Member, Doctoral Dissertation Committee

Jeffrey Hallam, Ph.D., Member, Doctoral Dissertation Committee

Accepted by Sonia Alemagno, Ph.D., Dean, College of Public Health

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Chapter 1: Introduction

In the 21st century, the paradigm of health care delivery has shifted from medicine to preventive care, which embraces complex human interactions with the environment, and sociopolitical and economic processes (Perry et al., 2014). Preventive care can reduce disease and avoid use of high-cost services. Low-income adults, whether privately insured, publicly insured, or uninsured, report higher risks of chronic conditions and risky health behaviors that may be amenable to preventive care (Ku, Paradise, & Thompson, 2017).

What is a Community Health Worker?

The role of Community Health Workers (CHWs) is well-established in bridging the gap between the health system and at-risk populations, such as low-income, pregnant women and those with chronic disease, by addressing the social determinants of health (Balcazar et al., 2011; Sabo et al., 2017; Surjaningrum et al., 2018). The American Public Health Association (APHA) defines CHWs as "frontline public health workers who are trusted members of and/or have an unusually close understanding of the community they serve" (APHA, 2019). They are increasingly recognized as integral members of health care teams, especially in poor and underserved communities (Bodenheimer et al., 2009; Institute of Medicine, 2002). CHWs' involvement has been recognized as instrumental in the implementation of programs that focus on improving and promoting community health by linking individuals to social and health services (Cosgrove et al., 2014; Rosenthal et al., 2010).

CHWs in the U.S.

CHWs have many different titles depending on where they are employed. These names include: case manager/case worker, community health advocate, community health, outreach worker, community organizer, enrollment specialist, health ambassador, health educator, public health aide, peer educator, and promotor/a, among others.

In 2000, there were approximately 86,000 CHWs in the United States, with California and New York having the most (Health Resources and Services Administration [HRSA], 2007). This number increased to 100,000 in 2014, according the Center for Disease Control and Prevention ([CDC], 2014). In 2008, the state of Ohio had 850 CHWs, including certified and non-certified (Whalen Smith et al., 2018). The majority of CHWs are female (82%) and between the ages of 30 and 50 (HRSA, 2007). CHW race and ethnic descriptions are as follows: 39% identify as Non-Hispanic Whites, 35% identify as Hispanic/Lantinx, 15.5% identify as Black or African American (15.5%), 5% identify as American Indian or Native American (5%), and 4.6% identify as Asian or Pacific Islanders (HRSA, 2007).

The CHW workforce has contributed to significant improvements in health outcomes by serving as a critical link between public health and human development systems and communities (Brownstein et al., 2005; Kangovi et al., 2014) and is recognized by the United States Department of Health Services for its contribution to reach underserved Americans to reduce racial and ethnic health disparities (Perry et al., 2014). CHWs are employed by clinical providers (hospitals/health systems, federally qualified health centers), public or private health plans (community-based organizations and other nonprofit entities, such as universities or community coalitions), and governmental or social agencies, such as local health departments (Malcarney et al., 2017).

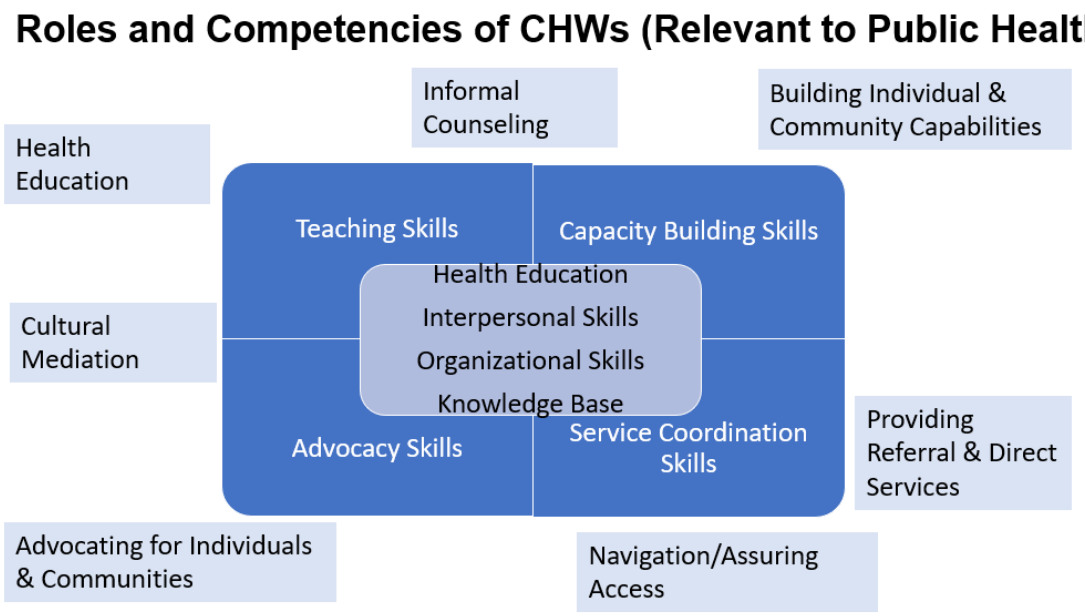
Twelve U.S. states (Massachusetts, Connecticut, New York, Maryland, Ohio, Indiana, Kentucky, Texas, New Mexico, Arizona, Nevada, and Oregon) require CHWs to meet training or certification standards (Rural Health Information Hub [RHIhub], 2020). CHW credentialing varies by state and is provided by the Department of Human Services, Board of Nursing, or a third-party entity (Association of State and Territorial Health Officials [ASTHO], 2020). Often, credentialing is necessary to participate in reimbursement for services provided by CHWs (ASTHO, 2020). Findings from a national survey of CHWs found that training and certification improved CHWs' income and retention levels while also facilitating Medicaid reimbursement for their services (Kash et al., 2007). Certification typically includes 100 classroom training hours,130 hours in field experience, and evaluation of skills (Berthold, 2016).

Alignment of CHWs with Public Health Practice

CHWs provide critical contributions to public health practice in the U.S. related to preventive care in general, the Healthy People 2030 objectives associated with access to health care (Office of Disease Prevention and Health Promotion, 2024), and the core functions associated with the CDC's (2023) 10 Essential Services of Public Health. The roles of CHWs are supported by core competencies, which are the knowledge and skills needed in order to perform their job well. The core roles of CHWs include providing outreach, health education, client-centered, informal counseling, case management, community organizing, and advocacy. The core competencies for CHWs include a knowledge of public health, behavior change, ethics, and community resources and the ability to provide health information, facilitate groups, resolve conflicts, and conduct an initial client interview or assessment (Berthold, T. (2016). As shown in Figure 1, one skill can support multiple roles.

Figure 1

The Relationship Between CHW Core Competencies and Roles (Berthold, 2016, p. 16.)



Approximately six out of ten Americans live with at least one chronic disease, including heart disease, cancer, or diabetes. These and other preventable chronic diseases are the leading causes of death and disability and drivers of high health care costs (CDC, 2019). Preventing chronic diseases, or managing symptoms when prevention is not possible, can reduce the costs and the significant burden of chronic disease in the United States (Benjamin, 2011). CHWs focus on providing support to at-risk individuals and have the potential to improve access to preventive care and contribute to reduced hospitalization and re-hospitalization rates, particularly among underserved populations (Sharma et al., 2019).

Ensuring access to health care is one of the objectives included in Healthy People 2030 (Office of Disease Prevention and Health Promotion, 2024). CHWs play a key role in providing community-based services. Importantly, CHWs often work in programs addressing

the root causes of health inequalities, including race and ethnicity, income, education, and geographical location.

The role of CHWs aligns with the three core functions used to frame the 10 Essential Public Health Services (CDC, 2023), which are aimed at improving population health. The three core functions include assessment, policy development, and assurance. CHWs contribute to assessment through tracking and regularly reporting indicators of a community's health status, such as the number of births, deaths, or flu cases. CHWs contribute to policy development by informing, educating, and empowering their clients and communities to advocate for themselves and do something about their own health and the health of their families. CHWs contribute to assurance by linking and providing care to those who need it and by coordinating social and health services, including health insurance enrollment and assistance in scheduling and transportation to medical appointments.

The Association Between CHW Motivation and Program Effectiveness

A large body of literature has focused on the effectiveness of the outcomes for programs that utilize CHWs in the areas of adult management of chronic disease, maternal and child health (Chiyaka et al., 2016), community mobilization (Brownstein, et al., 2017), research involving minority groups (Levine et al., 2016), and decreasing emergency department visits and hospitalization and readmission rates for high-risk patients (Massachusetts Department of Public Health, 2014). Research also suggests an increasing need for CHW services (Kash et al., 2007), which highlights the interests of many stakeholders in pursuing models that employ CHWs as part of the care team.

Key obstacles that CHWs face may include a lack of integration into the primary care setting, the need to have or acquire a range of skills (for example, technology use for

electronic health record documentation), a lack of structured working space, and a lack of clinical knowledge and organizational skills needed to interact with other care teams. When not addressed, the lack of training and high demand in these job requirements often leads to poor performance and high turnover rates (Chapman et.al., 2017). Unfortunately, there has been limited focus in the U.S. on how the performance and retention of CHWs is affected by individual CHW factors, such as motivation, self-esteem, attitude, competency, guideline adherence, job satisfaction, and the capacity to facilitate empowerment of communities (Kangovi et al., 2014). Therefore, a need exists to better understand the context and conditions in which U.S.-based CHWs work in order to support them in improving their performance and realizing their potential from their own perspective (Jaskiewicz & Tuleno, 2012; Theobald et al., 2015).

Multiple researchers in developing countries have considered the relationship between individual CHW motivation and program efficacy (e.g., Brunie et al., 2014; Daneshkohan et al., 2014; Mpembeni et al., 2015; Tripathy et al., 2016), although there is limited focus by U.S. researchers on how the outcomes of programs are affected by poor motivation. Although it is possible strategies associated with positive performance in other countries might have no effect, or even the opposite effect on U.S.-based CHWs because of differences in contextual or health system factors, there are still learning points that might be concluded from review of existing literature conducted in other countries (Theobald et al., 2015).

Research studies conducted in low-income countries have identified satisfaction with provision of services (Tripathy et al., 2016), career development (Willis-Shattuck et al., 2008; Winn et al., 2018), and ongoing availability of opportunities for training (Mpembeni et al., 2015) as key motivators. Other researchers have identified intrinsic motivators, such as being

a helper, pride in work, and their own health improvement, as stronger sources of motivation than external motivators including financial incentives (Javanparast et al., 2011). Importantly, CHWs' desire to improve health, serve people, and contribute to the community enhanced program outcomes (Dawson et al., 2008; Franco et al., 2002; Latham & Pinder, 2005).

Public Health Contribution

CHWs in the U.S. will continue to play an important role in ensuring as many individuals as possible have access to a range of preventive care opportunities. According to the Office of Disease Prevention and Health Promotion (2024), one in ten Americans has no health insurance, emphasizing the ongoing importance of this community-based resource. Kirkland et al. (2024) concluded that intent to leave a CHW position among U.S.-based CHWs was associated with dissatisfaction with perceived organizational support, concerns about job security, and pay. This suggests motivations may differ among U.S.-based CHWs when compared to CHWs elsewhere. In combination, the gap of research on U.S.-based CHWs and the association between motivation and program outcomes demonstrates the critical need to better understand the context and conditions in which U.S.-based CHWs work in order to support them in improving their performance and realizing their potential from their own perspective.

Therefore, the three aims of this dissertation are to:

1. Integrate findings from previously published research conducted about CHW motivation to identify contrasting, overlapping, and inconclusive findings.
2. Identify and describe specific motivating factors in detail, through analysis of group interviews with Northeast Ohio-based CHWs.
3. Qualitatively and quantitatively explore and compare ranking of motivating factors among a local and statewide group of CHWs in Ohio.

Document Orientation

The next three chapters of this dissertation present three separate research studies on the topic of CHW motivation. Chapter 2 describes an international scoping review of published research reporting factors which impact CHW retention and turnover. Chapter 3 describes an exploratory qualitative focus group study, framed in Self-Determination Theory (Deci & Ryan, 1985) and aimed at improving understanding of the contexts, challenges, and motivators that impact CHW practice. Chapter 4 describes mixed methods results of the integration of secondary analysis of themes from the research conducted in Chapter 2 with an assessment conducted with CHWs across the state of Ohio to rank and group motivational factors. Chapter 5 considers the areas of commonality and contrast within the results of the three research studies, describes public health implications of this work, and provides recommendations for future research.

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Chapter 2: Manuscript I

An International Scoping Review of Community Health Worker Retention and Attrition

Synopsis

The primary goal of Manuscript I was to examine previously published research on the reasons for Community Health Workers leaving or having the intention to leave the CHW profession using a scoping review. Five databases were included in the search, and a total of fifteen records met inclusion criteria.

The manuscript that follows has been formatted following guidelines provided in the Publication Manual of American Psychological Association, 7th edition. This manuscript has not yet been submitted for publication.

Abstract

Objective: This scoping review aims to comprehensively understand the reasons for Community Health Workers (CHWs) worldwide leaving or intending to leave the CHW profession and to explore trends in post-position employment or other activities.

Participants: The sample was comprised of articles reporting results of original research conducted on factors associated with attrition, retention, and career development for certified and uncertified CHWs in developing and developed countries published between 2019 and 2024.

Methods: A comprehensive search strategy was undertaken across PubMed, MEDLINE Complete, Academic Search Complete, Health Source: Nursing/Academic Edition, and CINAHL. The search was conducted in January of 2024, and Joanna Briggs Institute methodology was followed.

Results: Fifteen research studies were included. Most common data types included qualitative or multiple methods. The most commonly described incentivizing factors included desire for greater structure and support in training, management, and scheduling. There were inconsistent results regarding the role of financial incentives on attrition.

Conclusions: This scoping review identified a paucity of research on CHW-specific decisions to leave a position. Additionally, there is limited information about whether CHWs leave their position, leave the field, or no longer work or volunteer outside of the home. The role of financial incentives of various types and amounts warrants further investigation.

Community Health Worker Turnover Rates in the United States and Globally: A Scoping Review

Introduction

Community Health Workers (CHWs) are recognized as part of the multidisciplinary social and health services in the United States and globally. CHWs are trusted members of the community with knowledge of local resources and shared life experiences, which uniquely positions them to identify and mitigate problems related to disparities in the access to health services by connecting people to needed social and health services (Corder-Mabe et al., 2019). Public sector, community-based organizations, health systems, and health insurance organizations are among the largest employers of CHWs in the United States. CHWs' suitability in these sectors stems from their ability to address social determinants of health, promote access to primary and preventive health programs, and consequently, to improve health outcomes and reduce health care costs (National Institute for Health Care Management [NIMCH], 2021).

Turnover rate of CHWs is an important aspect of sustainability of social and health programs. Review of previous studies identifies scarcity in current data on global turnover rates and associated factors in many settings. Globally, several CHW programs have reported attrition rates ranging from 3.2% to 77% in developing countries (Bhattacharyya et al., 2016). The high rates for global attrition are attributable to inadequate and irregular pay, lack of family support, better employment opportunities in other fields, promotion, lack of time, and lack of sustainability in programs (Bhattacharyya, et al.2016; Nkonki, et.al., 2011).

Data is limited regarding turnover rates in both the U.S. and low-income countries. Most research studies have focused on the outcomes of CHW programs, training, and certification or on CHW program sustainability (e.g., Scott et al., 2018). CHW turnover causes critical

breakdowns in the delivery of social and health services to high-risk populations. In research conducted in Kenya, Ngugi et al. (2018) described individual factors, including gender, age, marital status, and education, and environmental factors, such as rurality, program, training, culture, supervision, and peer support, which influence CHW retention and turnover rates. In high income countries, CHW turnover has been attributed to lack of program funding, poor remuneration, lack of recognition, and inadequate integration in the health care system (Jones et.al, 2022).

Complicating understanding of retention are inconsistent definitions of CHWs, which is particularly challenging in high-income countries like the U.S. Terms for persons who engage in community-based healthcare support in the U.S. include community health worker, as well as promotor/a, doula, home visitor, navigator, outreach and enrollment facilitator, and preventive services provider. Standards, services, education, and credentialing varies (Insure the Uninsured Project, 2021), further complicating the ability to compile numbers or quantify entry and attrition trends.

Purpose of the Present Study

High turnover in this cadre is associated with gaps in delivery of services, loss of opportunity to build upon experience established among community and health systems, increased transactional costs in relation to recruitment and training, and poor program outcomes (Maes & Kalofonos, 2013; Alam & Oliveras, 2014). Understanding the causes and existing interventions to mitigate high turnover rates will help CHW programs develop skills and increase retention for the well-need taskforce. In this scoping review, we seek to (1) explore the reasons for leaving or intending to leave the CHW profession, (2) analyze the challenges that might give insight into turnover reasons, (3) identify any strategies which have been implemented and

evaluated in the studies that address the issues related to CHW turnover, and (4) address the question: “Where do CHWs go when they leave the profession?”

To ensure this work was unique, a search for similar review articles was conducted. No systematic or scoping reviews were found after searching the following databases: CINAHL Plus with Full Text, PubMed, Business Source Complete, and MEDLINE Complete. Additionally, no systematic reviews, completed or otherwise, on the topic have been registered on PROSPERO. The Joanna Briggs Institute’s (JBI) methodology (updated by Peters et al., 2020) for conducting scoping reviews was appropriate to address the purpose of this study, which is identifying and describing the research conducted on turnover rates among CHWs.

Methods

A scoping review protocol was developed, following guidelines by Peters et al. (2020) to outline each step in the process thoroughly. Steps are detailed below.

Inclusion Criteria

Research studies were included in this scoping review if they met the following criteria: population (articles must focus on only Community Health Workers); concept (articles must focus on attrition and its contributing factors and/or recruitment/retention interventions or strategies; types of evidence (exclude commentaries, letters, prior review and systematic review articles, and protocols); published after 2019 and written in English. Published studies in the following databases were included from the inception of the database until February 2023: CINAHL Plus with Full Text, PubMed, Business Source Complete, and MEDLINE Complete.

Search Strategy

Following the guidelines set forth by Peters et al. (2020), the search strategy for this scoping review consisted of three phases. All search strategies were drafted by a public health subject specialist librarian further refined through team discussion, and final searches were

executed by the public health librarian. A complete search strategy for the CINAHL Plus with Full Text, PubMed, Business Source Complete, and MEDLINE Complete database is included in Appendix A.

Phase I.

Phase I of the search process involved preliminary searches based on the general keywords of "Community Health Workers" and "turnover/attrition." The public health librarian utilized the results of this search to analyze potential subject headings, index terms, and keywords to begin drafting the scoping review search strategy. The team discussed and reached a consensus on the terminology to be used.

Phase II.

Phase II consisted of a systematized search of the four databases mentioned above, drafted and executed by the public health librarian. A combination of PsycINFO thesaurus terms, CINAHL subject headings, MeSH terms, and keywords was used, including terms related to Community Health Workers, personnel turnover, personnel retention, turnover intention, attrition, intent to leave, employee retention, and labor turnover. In these searches, all components of the database records were searched, and no limiters were applied.

Sources of Evidence

Following each search phase, all citations were uploaded into a shared file among researchers. Following the removal of duplicates, the titles and abstracts of retrieved citations were screened independently by two researchers against the inclusion criteria. Full text versions of citations were pulled if inclusion criteria were potentially relevant. The full text articles were reviewed in detail by the same two independent reviewers. Disagreements between reviewers at any stage during this process were resolved by consensus.

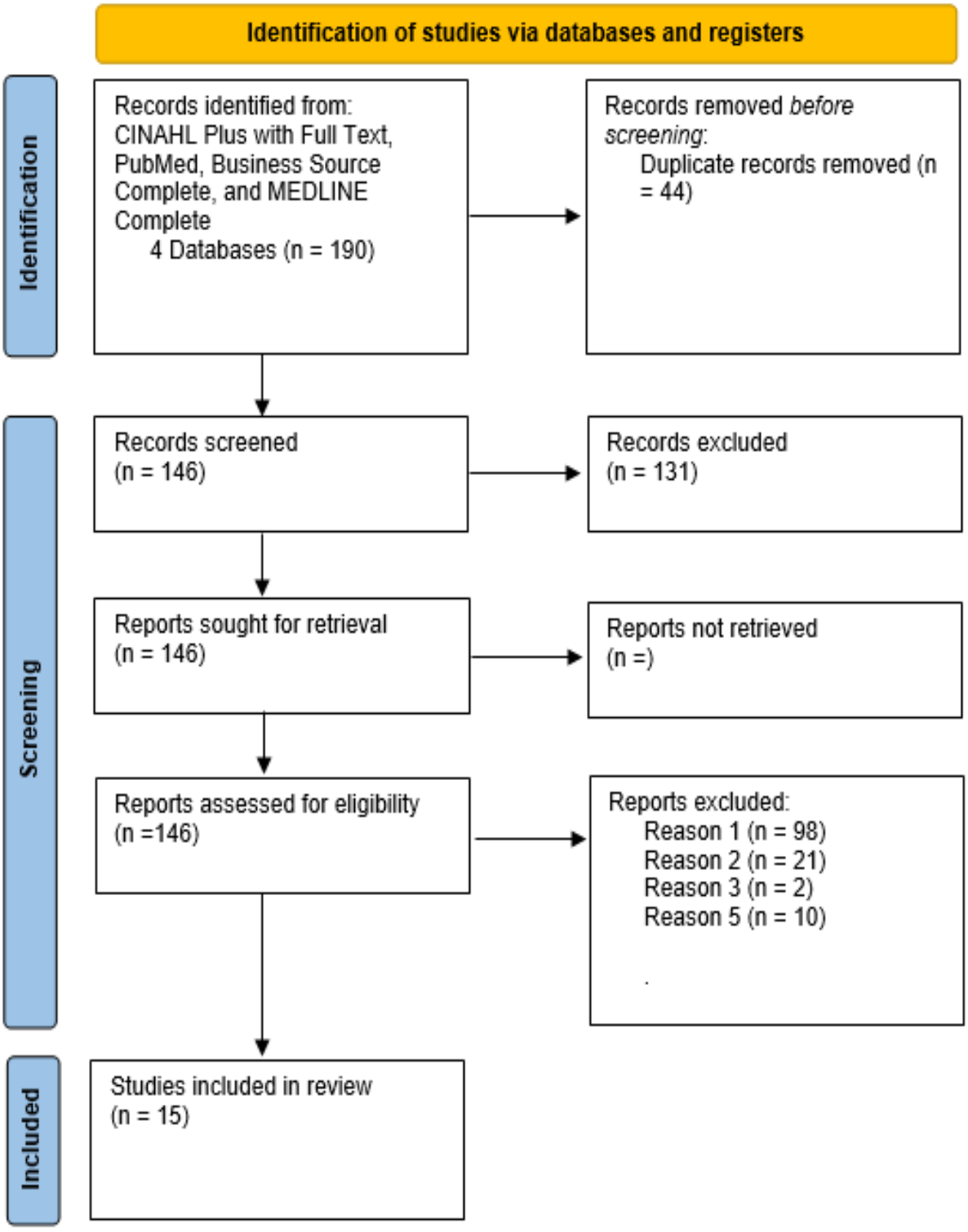
Data were extracted from the 15 papers included in the scoping review by two independent reviewers using a data extraction tool developed by the researchers in accordance with the aims of the study. The data extraction tool was developed at the study's beginning and refined throughout the data extraction process to ensure relevant data were captured. The following data were extracted from studies meeting inclusion criteria: general characteristics **(**e.g., title, author(s), publication year, journal, aims/purpose, method/design), sample characteristics (e.g., study location(s), participant description, CHW definition (Health Workers Community Outreach Specialist, Lay Health Advisor, Outreach Worker, Health Navigator, etc.), intervention type (community-based program, healthcare, health department, etc.), concept (reason for leaving/intention to leave, interventions to prevent turnover (training, incentives, renumeration, promotion/career path, supervision, recognition)), where do CHWs go when they leave?, duration of the intervention, key findings that relate to the review question, major limitations, and other key notes. A third researcher compared and checked data extraction. No inconsistencies were identified in the data extraction checking stage.

Results

The search from phases I and II of pre-selected databases generated 146 unique studies, of which 15 met inclusion criteria for this scoping review. Using a PRISMA template developed by Page et al. (2021), Figure 1 illustrates the entire screening process in detail.

Figure 2

Flow Chart of the Search Strategy and Results

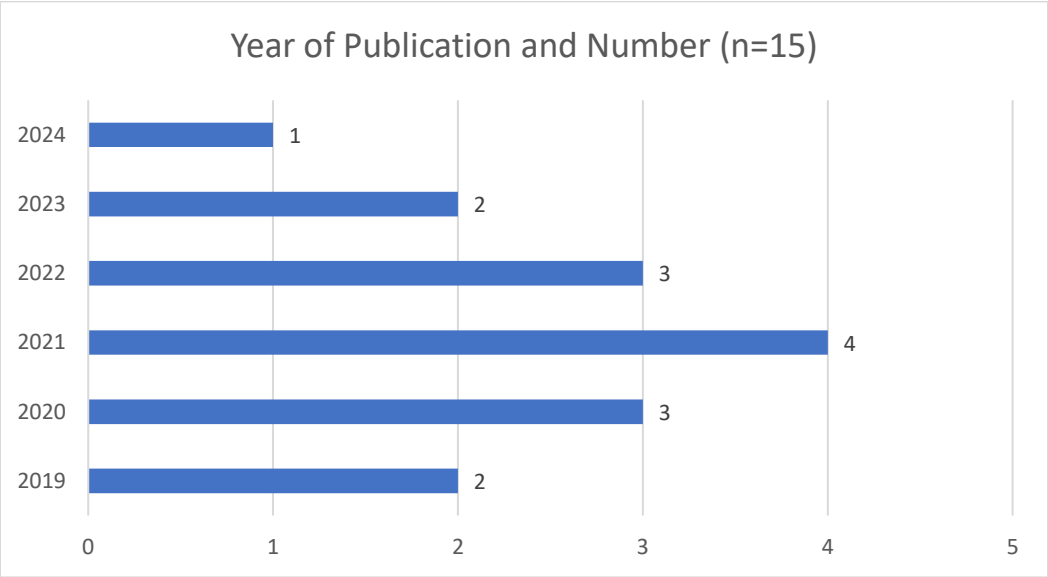


Data Context

Most papers were published in 2021. The breakdown is shown in Figure 3.

Figure 3

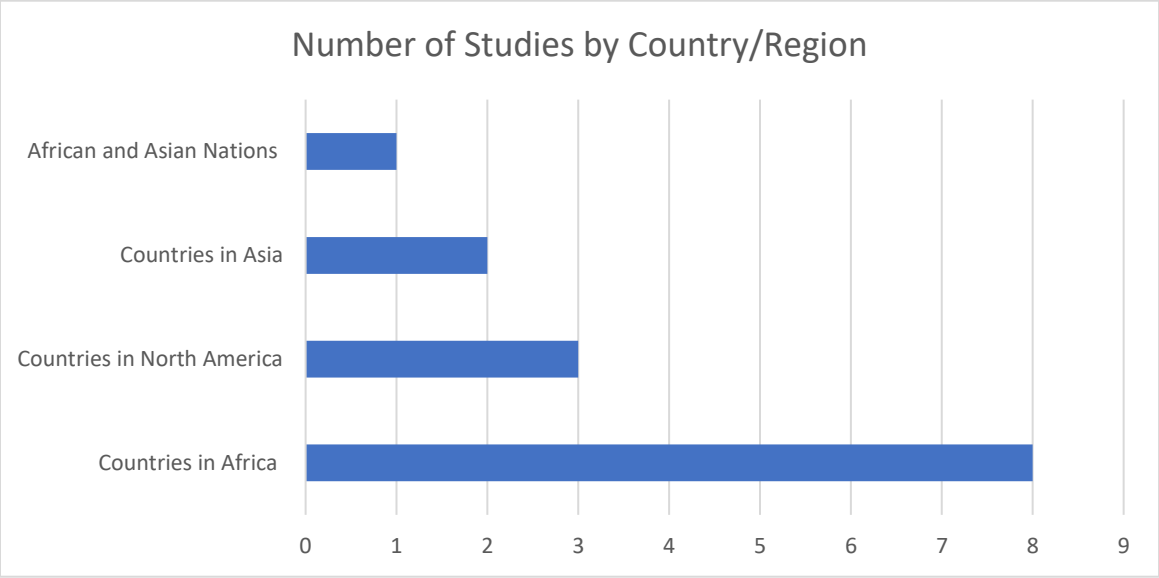
Number of Studies Included in Scoping Review by Year of Publication



Authors of eight articles (53%) reported research from countries in Africa (i.e., Cameroon, Ethiopia, Kenya, Mozambique, and Uganda) (Agarwal et al., 2021; Arora et al., 2020; Hämmerli et al., 2022; Lusambili et al., 2021; Nyanja et al., 2021; Olandeji et al., 2022; Steege et al., 2020; Woldt et al., 2023). Authors of three articles (20%) reported research from countries in North America (i.e., U.S. and Canada) (Kirkland et al., 2024; Perreira et al., 2019; Smithwick et al.), and authors of two studies (13%) reported research conducted in Asian countries (i.e., Bangladesh and Indonesia) (Gadsden et al., 2022; Glenn et al., 2021). Authors of one article (7%) included results from multiple African and Asian nations (Vallières et al., 2020).

Figure 4

Number of Studies Included in Scoping Review by Country/Region



Focus of Studies

Motivators for Retention

The primary area of focus of authors of six articles was identification of preferred incentives or motivators to reduce attrition (Agarwal et al., 2021; Gadsden et al.,2022; Hämmerli et al., 2022; Lukman et al., 2019; Olandeji et al., 2022). Authors of three articles explored reasons for leaving the position (Arora et al., 2020; Glenn et al., 2021; Lusambili et al., 2021), and authors of two articles identified factors associated with intent to leave (Kirkland et al., 2024; Perreira et al., 2019). Additional focus areas, each covered in one article, included influence of the lack of advancement on attrition (Smithwick et al., 2023), ways to improve recruitment of females in an area where males comprise most CHWs (Steege et al., 2020), and assessment of fit of data to a predictive model (Nyanja et al., 2021). One study (Wolde et al.,

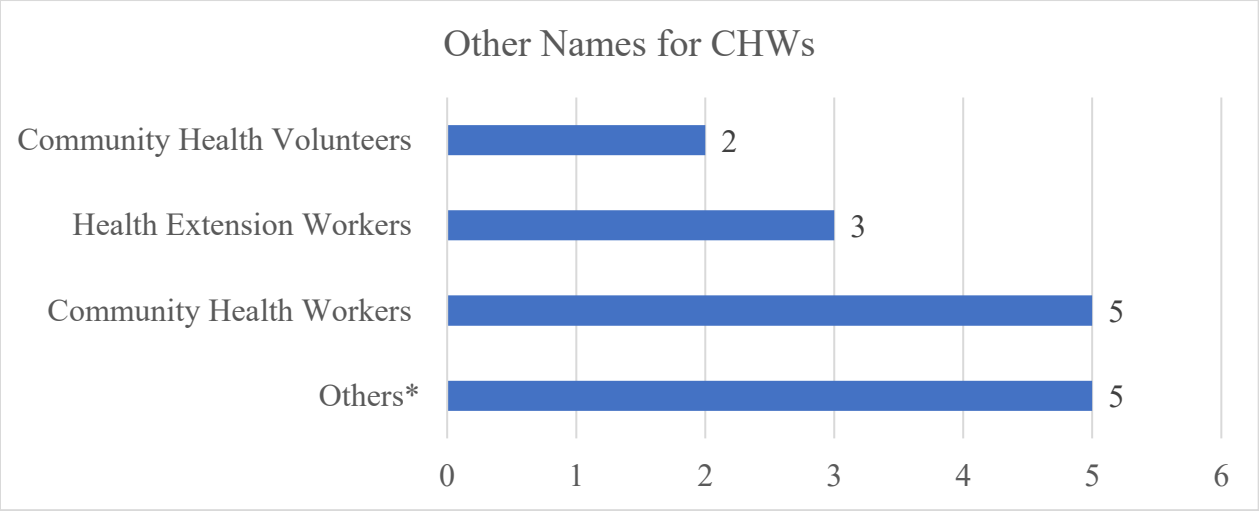
2023) investigated attrition rates. This was the only study attempting to identify whether CHWs who left their position continued to work in another healthcare-focused position. Additionally, Wolde et al. (2023) investigated reasons for leaving.

Community Health Worker Description

The term "Community Health Worker" was used in five articles (Agarwal et al., 2021; Glenn et al., 2021; Hämmerli et al., 2022; Kirkland et al., 2024; Smithwick et al., 2023). Three articles referred to "Health Extension Workers" (Arora et al., 2020; Olandeji et al., 2022; Wolde et al., 2023). Two articles referred to "Community Health Volunteers" (Lusambili et al., 2021; Nyanja et al., 2021). Other terms used in a single article included "Agentes Polivalentes Elementares/APEs" (essential multipurpose agents) (Steege et al., 2020), "Close to Community" (Vallières et al., 2020), "Health Support Workers" (Perreira et al., 2019), "Village Health Volunteers" (kader in local language) (Gadsden et al., 2022), or "Volunteer Health Workers" (Lukman et al., 2019).

Figure 5

Other Names for Community Health Workers



(*) Agentes Polivalentes Elementares/APEs, Close to Community, Village Health Volunteers, and Volunteer Health Workers.

Evidence Type

Authors of seven articles reported results of qualitative individual or group interviews (Arora et al., 2020; Glenn et al., 2021; Hämmerli et al., 2022; Lukman et al., 2019; Lusambili et al., 2021; Nyanja et al., 2021; Steege et al., 2020). Authors of four articles reported results from multiple or mixed methods (Olandeji et al., 2022; Smithwick et al., 2023). Authors of two articles reported results from fixed response survey research (Kirkland et al., 2024; Perreira et al., 2019; Vallières et al., 2020; Woldt et al., 2023). Authors of two articles reported results from choice experiments where preferences were ranked or assigned parameter estimates (Agarwal et al., 2021; Gadsden et al., 2022).

CHW Support and Training

Findings that recurred across the articles included a desire for greater structure and support in training, management, and scheduling (Agarwal et al., 2021; Gadsden et al., 2022; Hämmerli et al., 2022; Kirkland et al., 2024; Lusambili et al., 2021; Olandeji et al., 2022; Steege et al., 2020), preference for resource and transportation support (Agarwal et al., 2021; Arora et al., 2020; Olandeji et al., 2022), recognition for work, individual identifiers, such as uniforms or badges (Agarwal et al., 2021; Gadsden et al., 2022; Lusambili et al., 2021), and a pathway to career progression (Olandeji et al., 2022; Smithwick et al., 2023; Steege et al., 2020). Notably Steege et al. (2020) found U.S.-based CHWs wanted to progress and remain in a CHW role rather than transitioning into a different role. Identified intrinsic motivators included community affiliation, perceived social status, and perceived value of work (Arora et al., 2020; Hämmerli et al., 2022; Vallières et al., 2020).

Financial Incentives

Financial incentives were recommended in multiple studies (Arora et al., 2020; Gadsden et al., 2022; Kirkland et al., 2024; Lusambili et al., 2021; Steege et al., 2020), although participants in Gadsden et al. (2022) demonstrated preference for the most modest stipend when given a range of values. Participants in Lusambili et al. (2021) recommended ownership of some resources (outdoor tables, chairs, tents) be transferred to CHWs so they could earn money by renting these out for community events to provide themselves with an additional source of income that would not interfere with CHW work. Participants in Hämmerli et al. (2022) did not prioritize financial incentives. Participants in Glenn et al. (2021) asserted financial incentives were not necessarily a priority, although providing and later removing a financial incentive due to expiration of a funding grant was believed to have a demotivating influence. An overview of the included studies can be found in Table 1: Research on CHW Retention and Attrition.

Table 1

Table 1: Research on CHW Retention and Attrition

Author	Location	Stated Aims	Terms Used	Sample	Research Methods	Specific Focus	Duration	Outcome Assessment	Findings	Limitations
Agarwal et al., 2021	Uganda	To determine preferences for job incentives to improve performance and retention	Village Health Teams (VHTs) are also referred to as CHWs.	399 CHWs in 8 districts in Uganda	Choice experiment to assess preferences for incentives	Gathering data to develop interventions to prevent turnover	N/A - This is an information gathering assessment only.	The incentives of interest were identified in the initial phase and assessed in the second phase using regression models to develop ranking.	Preferred incentives included transportation means and allowances, identification badges or uniforms, in-service training, salary, appropriate workload, recognition, and access to tools.	All potential incentives or possible combinations cannot be presented. A variety of individual and experiential factors may impact interpretation of options and selection of alternatives.
Arora et al., 2020	Ethiopia	To improve retention of CHWs in Ethiopia	Lay CHWs trained through the Health Extension Program (HEP) are referred to as Health Extension Workers (HEWs).	Active Health Extension Workers (HEWs) = 16; former HEWs = 20; Key informants = 11	Qualitative interviews	Investigate reasons for leaving	N/A - This is qualitative interview research.	Themes were derived from qualitative interview data.	Financial factors, material factors (i.e., lack of resources and transportation support) and non-material factors (i.e., work location inconvenient to home and associated lack of community affiliation, lack of recognition, lack of career progression) were demotivators and reasons for leaving one's position. Intrinsic factors, such as community affiliation, were motivators for entering the field and inspired positive impressions of the position, although these were not always ample to inspire long term retention.	Small sample, self-report qualitative research subject to interpretation of researchers. Not necessarily generalizable outside of Ethiopia.

Table 1 Continued

Author	Location	Stated Aims	Terms Used	Sample	Research Methods	Specific Focus	Duration	Outcome Assessment	Findings	Limitations
Gadsden et al., 2022	Indonesia	To determine CHW preferences for employment conditions	Village health volunteers referred to locally as kaders	471 CHWs in 28 villages	Choice experiment to assess preferences for employment conditions	Gathering data to develop interventions to prevent turnover	N/A -This is an information gathering assessment only.	Potential influential working conditions were identified in prior secondary and interview research. These were assessed in the present study using regression models to develop ranking.	Preferred conditions included a small monthly financial benefit, recognition via a progress report, and greater structure in training and supervision.	Local non-random sample, choice scenarios subject to interpretation and threats to internal validity
Glenn et al., 2021	Bangladesh	To explore the impact of removing performance-based financial incentives while considering the impact of intrinsic motivators and removal of financial motivation	Community Health Workers - volunteer	43 CHW supervisors from seven districts in Bangladesh	Qualitative group interviews	Investigate reasons for leaving (only assessed role of financial compensation)	N/A - This is qualitative interview research.	Themes were derived from qualitative interview data.	Providing then removing a financial incentive was perceived as more demotivating than never having had the financial incentive. Respondents suggested this resulted in decreases in motivation, level of service, and retention.	Participants were supervisors rather than front line CHWs, so their perceptions may not be entirely accurate. Participants may have been using research participation with the aim of advocacy and presented their views accordingly.
Hämmerli et al., 2022	Cameroon	To identify motivational factors for CHWs	Community Health Workers (CHWs)	11 CHWs in the Dschang district	Qualitative individual interviews	Gathering data to develop interventions to prevent turnover	N/A - This is qualitative interview research.	Themes were derived from qualitative interview data.	Individual factors included sense of responsibility and interest in health. Community factors included embeddedness and social status. Organizational factors included autonomy, training, and supervision. Financial renumeration was not viewed as a critical motivator.	Small, local sample, potential for interviewer bias and participants with limited duration of experience

Table 1 Continued

Author	Location	Stated Aims	Terms Used	Sample	Research Methods	Specific Focus	Duration	Outcome Assessment	Findings	Limitations
Kirkland et al., 2024	United States	To investigate organizational factors associated with intention to leave the CHW profession	Community Health Workers (CHWs)	1858 CHW survey responses	Fixed response survey research administered at 2 time points	Investigate reasons for intent to leave	N/A- This is survey research.	Analysis of survey items	Proportion expressing intent to leave increased from 25% in 2017 to 28% in 2021. Key predictors included dissatisfaction with organizational support, pay, or job security.	The survey measured intent to leave rather than actual retention. Only CHWs affiliated with larger public health departments were included.
Lukman et al., 2019	Indonesia	To improve performance and reduce attrition among Volunteer Health Workers (VHWs)	Volunteer Health Workers (VHWs)	8 VHWs	Qualitative group interviews	Prevent turnover and improve performance	N/A - This is qualitative interview research.	Themes were derived from qualitative interview data.	Strategies to improve performance/reduce turnover include emphasizing value of their contribution, be explicit about challenges, recognition of activities and feelings, emphasize the need to have a helper orientation to succeed, ensure volunteer training is more accessible	Small, local sample with results that only reflect a limited region
Lusambili et al., 2021	Kenya	To examine socio economic challenges and consider incentivization strategies	Community Health Volunteers (CHVs)	81 CHVs in 10 focus group discussions.; 8 key informants including individuals with government, management, and stakeholder roles	Qualitative group and individual interviews	Investigate reasons for leaving	N/A - This is qualitative interview research.	Themes were derived from qualitative interview data.	Key challenges include lack of incentives/financial support, conflicts with personal/family responsibilities, poor organization and task planning, needing uniforms, badges or other designations of profession, owning and renting out chairs, tents, etc., which isviewed as a way to generate income through community-building activities.	Results only apply to this area and adjacent areas in the coastal region of Kenya due to context specific needs and circumstances.

Table 1 Continued

Author	Location	Stated Aims	Terms Used	Sample	Research Methods	Specific Focus	Duration	Outcome Assessment	Findings	Limitations
Nyanja et al., 2021	Kenya	To apply the Ultra Poverty Graduation model to consider applicability of preferred financial empowerment strategies	Community Health Volunteers (CHVs)	81 CHVs in 10 focus group discussions, 10 key informants including individuals with government, management, and stakeholder roles (nearly identical sample as used by Lusambili et al., (2021))	Qualitative group and individual interviews	Gathering data to develop interventions to prevent turnover	Themes were derived from qualitative interview data.	Qualitative findings used to inform a prespecified theoretical model	CHVs would benefit from owning productive assets (i.e., furniture and tents to rent out for events), weekly stipends, training enhancements, support to build savings, better access to healthcare for themselves, and support for integration into communities beyond their home.	Potential for social desirability bias as participants are current program affiliates; motivated volunteer participants may not reflect CHVs overall even within the context
Oladeji et al., 2022	Ethiopia	To identify preferred non-financial incentives that encourage retention of Health Extension Workers (HEWs)	Health Extension Workers (HEWs)	93 HEWs	Qualitative interviews to identify potential incentives followed by choice experiment to assess preferences for non-financial incentives	Gathering data to develop interventions to prevent turnover	N/A -This is an information gathering assessment only.	Potential influential factors were identified via interview research. These were assessed in the present study using regression models to develop ranking.	Highest ranked incentives included supportive management, career mentoring, access to amenitiess transportation or allowances career progressions and continuing education.	Only the highest six of eight potential motivators derived from focus groups were used in the choice experiment due to the statistical complications involved when a larger universe of choice items is presented. This study by its nature only applies to this particular context.

Table 1 Continued

Author	Location	Stated Aims	Terms Used	Sample	Research Methods	Specific Focus	Duration	Outcome Assessment	Findings	Limitations
Perreira et al., 2019	Canada	To explore associations between work environment, attitude, and outcome variables, including intention to stay	Health Support Workers (HSWs)	460 HSWs	Fixed response survey research	Assess intention to leave	N/A- This is survey research.	A series of standard assessments were administered in a single paper or electronic instrument. Scoring of items of interest was based on Likert-type ordinal scales in various ranges (1-4; 1-5; 0-6; 1-7).	Intention to stay and job satisfaction scored high among HSWs in both longer-term care and home and community care, although long term care workers perceived some aspects of their job less favorably, including safety and perception of empowerment.	Lower than ideal response rate means findings may not reflect most HSWs. Not necessarily generalizable outside of Ontario in Canada. Self-report and common methods bias may impact credibility of findings.
Smithwick et al., 2023	United States	To explore CHW perspectives related to lack of advancement	Community Health Workers (CHWs) and supervisors	10 CHWs contributed qualitative data associated with workforce development. 867 contributed survey data. 80 individuals contributed responses to a rapid poll. 6 CHW supervisors contributed individual interview data.	Various types of qualitative and quantitative data	Promotion/ career path	N/A - Data comes from various cross-sectional methods.	Undisclosed data integration and analysis processes that informed themes	Small sample, self-report qualitative research findings are not generalizable. The perspectives of those who left the profession were not solicited and may provide useful insights.	Difficulty of integrating results from multiple data types could limit accuracy of findings. Length of survey might impact credibility of results. Under sampling of Spanish speaking participants means their perspectives may not be fully represented.

Table 1 Continued

Author	Location	Stated Aims	Terms Used	Sample	Research Methods	Specific Focus	Duration	Outcome Assessment	Findings	Limitations
Steege et al., 2020	Mozambique	To improve recruitment and retention of female APEs	APEs (essential multi-purpose agents, analogous to CHWs elsewhere)	30 individual interviews and 22 participants across three focus groups; participants included APEs, APE supervisors, and community leaders.	Qualitative individual and group interviews	Improve recruitment of females to the profession and improve retention of APEs	N/A - Data come from interviews.	Themes were derived from qualitative interview data.	Challenges impacting women include literacy requirements, requirement for lengthy out of home stays during residential training. Single women working as APEs may leave the profession upon marriage to take on traditional gender roles in the home setting. Career progression, improved renumeration (including minimizing delayed payments), and improvements in working conditions/resources could improve retention for both male and female APEs.	Small sample, self-report qualitative research findings are not generalizable. The perspectives of those who left the profession were not solicited and may provide useful insights.
Vallières et al., 2020	Bangladesh, Indonesia, Kenya, Mozambique, Malawi, and Ethiopia	To develop a brief and quickly assessed measure of motivation among CTC providers	Close-to-community (CTC)	18 group and 106 individual interviews; 695 CTCs across the six nations surveyed	Qualitative and quantitative data	Develop instrument to assess motivation as a predictor of turnover	N/A - Data come from various cross-sectional methods.	Items derived from literature review and interviews were ranked in factor analysis process.	7 factors influence motivation and inform a 24-item developed instrument: Organizational commitment, extrinsic job satisfaction (colleague support, training, and recognition), intrinsic satisfaction (sense of accomplishment, and opportunities to use skills), work conscientiousness (reliable, and dependable); general motivation, and burnout	The developed instrument requires additional validation in longitudinal contexts to assess usefulness. Data used to inform the instrument may reflect the particular characteristics of the assessment sample rather than the larger population of CTCs.

Table 1 Continued

Author	Location	Stated Aims	Terms Used	Sample	Research Methods	Specific Focus	Duration	Outcome Assessment	Findings	Limitations
Wolde et al., 2023	Ethiopia	To estimate the magnitude of attrition and determine where HEWs go after leaving	Health extension workers (HEWs)	3486 HEW files reviewed; 10 HEWs and 10 manager interviews	Primary and secondary data analysis	Attrition rates and where CHWs go	A cross-sectional assessment of 15 years' worth of data.	Attrition as a yes/no variable; qualitative data analyzed thematically	Attrition rate was 21.1%. Of 704 who provided additional information, 71.3% left the health sector, and 28.7% continued to work in healthcare. From qualitative analysis, reasons for attribution included: psychosocial (lack of community value/trust. personal issues), administrative or structural (burnout and poor support), salary and incentive-related, working environment (travel difficulties and remote locations).	Not all regions were included in the study so attrition may be underestimated.

Discussion

The aim of this scoping review was to identify and profile previous research on issues related to turnover and attrition of community health workers throughout the world. We identified and extracted data from 15 relevant articles. Most studies identified, explored, or ranked incentivizing factors. Although several study authors described an aim to use this information to develop future interventions (e.g., Agarwal et al., 2021; Hämmerli et al., 2022; Steege et al., 2020), no current published reports describing interventions to prevent attrition or the outcomes of such interventions were identified. In addition, this review identified a paucity of research on CHW specific decisions to leave a position and the extent to which these align with the incentivizing factors identified by authors of these studies. There was also limited information about whether and when CHWs who express intent to leave, assessed in two studies (Kirkland et al. 2024; Perreira et al., 2019), actually leave their position. When CHWs do resign, the extent to which they leave a specific position, leave the field, or no longer work or volunteer outside of the home is also unknown.

Across these studies, there were mixed results regarding the role of financial incentives of various types and amounts. The closest thing to a consensus finding is CHWs' desire to obtain transportation resources or reimbursement (e.g., Agarwal et al., 2021; Arora et al., 2020; Oladeji et al., 2022), which, when lacking, can make it difficult or impossible to carry out their work. The desire for predictable schedules to prevent interference with family responsibilities (e.g., Lusambili et al., 2021) also suggests how engaging in CHW work may be at a "cost" to individuals. These findings, along with variable ranking of the importance of financial incentives, suggests this issue warrants further investigation.

The relative lack of variety of research methods used across these studies, which included primarily qualitative (seven of 15) or mixed methods (four of 15) designs may reflect both the

preponderance of exploratory research aims or preferences by researchers and participants for real time exchange of information, or a combination of these. Because community health in practice can be seen to align with qualitative methods, the task of developing thematic findings following a conversation may also reflect a familiar process. However, one weakness with reliance on semi-structured interviews, the conventional qualitative approach, is the tendency of researchers to develop interview guides for their purpose which may or may not align well enough with other studies to facilitate integration of results. In the instance of this scoping review, ample categorical data could be identified to find connections and areas of overlap across studies, although potentially more specific findings were included in many or all studies that could not be adequately integrated to inform consensus results appropriate for this review.

Given that most of the reviewed research consisted of studies where the focus was factors that influence retention or attrition, one way to move the field forward is to systematically integrate these findings into a standard measure that can be applied across multiple contexts, ideally with minimum modifications. This has the benefit of being a faster and simpler assessment to administer and compile. Importantly, this also facilitates comparison of incentivizing factors across samples and contexts and through time.

Unique with respect to design was the article by Wolde et al. (2023) who used existing records to identify CHW attrition rates in Ethiopia. Wolde et al. (2023) endeavored when possible to determine where CHWs went when leaving positions, and whether or not they remained in a healthcare focused position. This efficient use of existing information provides a useful model for other researchers to follow. Advantages of secondary analysis as illustrated in this research include efficient use of existing resources and reduction of expenses, including the time needed to carry out primary research (Heaton, 2006).

Limitations of this scoping review include limitations within the studies included in this review; these are summarized in Table 1. Additional limitations that apply to this review include potential to overlook relevant articles and potential to overlook important findings in the reviewed papers. Use of a structured search process and multiple checkpoints during screening and extraction were strategies used to counter these limitations.

In summary, this review revealed both overlapping findings and areas where further research is needed. Development of a consistent measure of incentive factors that impact turnover and attrition among CHWs and that can be applied in multiple contexts may facilitate data gathering and identification of both broad and local trends.

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Chapter 3: Manuscript II

Community Health Worker Motivation in the U.S.: A Descriptive Focus Group Research Study

Synopsis

The primary goal of Manuscript II was to explore the context and conditions in which CHWs work and understand their motivation and barriers in their role from their own perspective to increase retention and effectiveness of their services.

The manuscript that follows has been formatted following guidelines provides in the Publication Manual of American Psychological Association, 7th edition. This manuscript has not yet been submitted for publication.

Abstract

Background: There is limited focus in the U.S. on how the performance of CHWs is affected by individual factors such as motivation and job satisfaction. When not addressed, the lack of training and high demand in these job requirements often lead to poor performance and high turnover rates.

Objective: The purpose of this exploratory research is to investigate the motivation of U.S.-based CHWs through use of qualitative methods and to develop recommendations for recruitment, training, and professional development of CHWs. The constructs of competence, autonomy, and relatedness from the Self-Determination Theory were used to frame data gathering and interpretation processes.

Methods: Seven focus groups were conducted to gain insight into CHWs' experiences and to elicit further reflections on perspectives on their own role, including their motivations, challenges, and career growth. Recordings were transcribed and stages of qualitative analysis were conducted through use of Quirkos software.

Results: Analysis revealed four primary themes within the data: preparing for the CHW role, navigating the CHW role, thriving in the CHW role, and reflecting on the CHW role. Key findings included that CHWs benefited from having had similar lived experiences to the clients they served, and they gained intrinsic motivation from contributing to health improvement in their home communities.

Conclusion: CHWs described profound challenges related to client needs and, at times, limited resources. CHWs gained intrinsic motivation from their developed competence in navigating challenges and were often self-directed in their work, although they felt loss of control when

client needs surpassed available resources. CHWs would additionally benefit from improvements in professional recognition, increases in resources, and additional opportunities for empathetic exchanges to encourage feelings of relatedness.

Keywords: *Community Health Workers; Focus Groups; Qualitative; Motivation*

Introduction

While Community Health Workers' (CHWs) performance has been evaluated at the user end via assessment of impact on patient and community health, there is limited focus in the U.S. on how the performance of CHWs is affected by individual factors such as motivation, self-esteem, attitude, competency, guideline adherence, job satisfaction, and the capacity to facilitate empowerment of communities (Kangovi et al., 2014). Key obstacles that CHWs face include lack of integration into the primary care setting, increased demand for skills (for example, use of technology for documentation in the electronic health records), lack of structured working space, and lack of clinical knowledge and skills to interact with other care teams. When not addressed, the lack of training and high demand in these job requirements often lead to poor performance and high turnover rates (Chapman et.al., 2017).

Programs employing CHWs have focused on ten programmatic domains, several of which align with fifteen individual factors developed by Furth et al. (2013) that contribute to effective CHW program outcomes. These ten programmatic domains include: roles and recruitment, training, accreditation, equipment and supplies, supervision, incentives community involvement, opportunity for advancement, data, and linkage to health system (Ballard et al., 2018).

While researchers in developing countries have identified strengths associated with improvement in the ten programmatic domains, through the process of measuring and understanding motivation of CHWs at an individual level in those domains (Brunie et al., 2014; Daneshkohan et al., 2014; Mpembeni et al., 2015; Tripathy et al., 2016), there is limited focus by U.S. researchers on how the outcomes of programs are affected by poor motivation (Jaskiewicz & Tuleno, 2012). In the U.S., CHW motivation and its influence has not been explored as a

major factor that may affect CHWs' contributions to the program outcomes. Therefore, there is a critical need to better understand the context and conditions in which CHWs work to support them in improving their performance and realizing their potential from their own perspective (Kok, 2011). The purpose of this exploratory research is to investigate motivation of U.S.-based CHWs through use of qualitative methods and to develop recommendations for recruitment, training, and professional development of CHWs.

Logan (2018) called for closer attention to CHWs' lived experiences as this provides crucial theoretical insights and offers applicable implications – especially in terms of informing policy development that seeks to integrate CHWs into the broader workforce. Maes et al. (2014) called for application of ethnographic research methods, including interviews and other methods, to elicit retrospective narratives of CHWs' lives to inform working relationships among CHWs, communities, and health institutions for better administration of such programs to serve communities effectively. Documenting the lived experiences of CHWs is critical to better understanding these workers and understanding their motivations for remaining in the workforce. Clearly any exploration of CHW motivation in the U.S. would benefit from use of a design that elicits CHW descriptions of the intersection of their lives and their profession.

Global Research on CHW Motivation

Although strategies associated with positive performance in other countries could have no effect, or even the opposite effect on U.S.-based CHWs because of differences in contextual or health system factors, there are still learning points that might be concluded from review of existing literature conducted in other countries (Theobald et al., 2015). Research on CHW motivation has been carried out in many low-income countries. In a mixed-method study conducted in India, in-depth interviews were carried out with 18 CHWs to explore their sources

of motivation (Tripathy et al., 2016.). CHWs reported satisfaction with the health services they provided and regarded them as essential, but they were not presented with opportunities for skill and career development. Other studies conducted in low-income settings such as Kenya, Mali, and Uganda, have shown that CHWs and other health workers take pride and are motivated when they are presented with opportunities for career development (Dieleman et. al., 2006; Kyaddondo, et al., 2003; Willis-Shattuck et al., 2008; Winn et al., 2018). Authors also found CHWs who had attended training in the preceding twelve months had higher motivation scores when compared to those who never attended training. Other researchers have identified initial and continuous training as motivating factors for CHWs. In Tanzania, Mpembeni et al. (2015) found that the strongest satisfaction factor for CHWs was related to work relations with varied CHW stakeholders and training. In India, Gopalan, et al. (2012) reported that CHWs felt empowered through the acquisition of knowledge and skills on community health through training.

Javanparast et al. (2011) identified multiple factors associated with the motivation and satisfaction of CHWs in India, including altruism, the desire to work hard, and meeting intrinsic needs, such as health improvement, helping the community, and pride. These factors have been identified as stronger sources of motivation than external stimuli, such as monetary incentives, community respect, and skill utilization. Through multiple studies, factors strongly associated with CHW satisfaction included relationships with health workers, serving communities, the availability of support, and the capacity to provide services with initial and continuous training opportunities. Along with this, CHWs' desire to improve health, serve people, and contribute to the community contributed to improved program outcomes (Dawson et al., 2008; Franco et al., 2002; Latham et al., 2005).

Theoretical Framework

This research is framed within Self-Determination Theory and has specific focus on the theoretical construct of motivation and applications of the performance evaluation and management (PEM) process. Motivation in the employment context has been defined as an individual's "degree of willingness to exert and maintain an effort towards organizational goals" (Franco et al., 2002, p. 1255) or "a set of energetic forces that originate both within as well as beyond an individual's being, to initiate work related behavior, and to determine its form, direction, intensity, and duration" (Pinder, 1998, p. 11). Although the concept of performance motivation is complex and not straightforward to quantify because it is not directly observable (Latha et al., 2005), some knowledge has been gained regarding health care provider motivation through survey research efforts (Bonenberger et al., 2014). Specifically, prior researchers in developing countries identified the need to strengthen human resources or supervision and health care workers' overall job satisfaction, self-efficacy, performance appraisal, and career growth as primary contributing factors to motivation (Hotchkiss et al., 2015; Willis-Shattuck et al., 2008). The findings of these studies illustrate crucial practices for providing support to CHWs in order to improve their motivation.

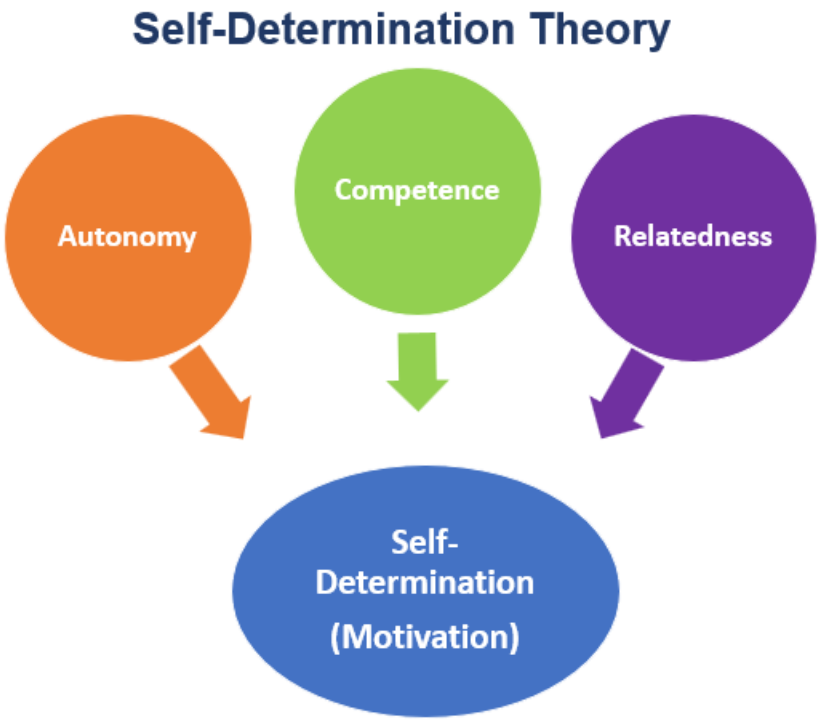
Self-Determination Theory (SDT)

The Self-Determination Theory (SDT), initially developed by psychologists Edward L. Deci and Richard M. Ryan, is a theory of human motivation and personality that concerns people's inherent growth tendencies and innate psychological needs. SDT suggests that people's inherent growth tendencies and innate psychological needs are the basis for their self-motivation and personality integration, as well as for the conditions that foster those positive processes (Deci & Ryan, 1985).

SDT specifically posits that to experience psychological growth, individuals require support for three basic psychological needs. The three fundamental needs are *competence*, or people's need to gain mastery of tasks and learn different skills, which facilitates their ability to take actions that will help them achieve their goals, *relatedness*, or people's need to experience a sense of belonging and attachment to other people, and *autonomy,* or people's need to feel in control of their own behaviors and goals. This sense of being able to take direct action that will result in real change plays a major part in helping people feel self-determined (Deci & Ryan, 1985).

Figure 6

Figure 1: A Diagram Depicting the Three Elements of Self-determination Theory (Deci & Ryan, 1985).



Motivation within SDT and PEM

The Oxford English Dictionary (2023) defines motivation as "the reason why somebody does something or behaves in a particular way" or "the feeling of wanting to do something,

especially something that involves hard work and effort. The SDT suggests two types of motivations: intrinsic motivations and extrinsic motivations. Intrinsic motivation pertains to activities done "for their own sake," or for their inherent interest and enjoyment, whereas extrinsic motivation concerns behaviors done for reasons other than their inherent satisfactions (Ryan & Deci, 2000). Extrinsic motivation concerns behaviors driven by externally imposed rewards and punishments which are typically experienced as controlled and non-autonomous (Ryan, 1982).

Motivation is integral to performance evaluation and management, as it plays an important role in both organizational and employee outcomes, such as organizational performance and personal well-being (Chong & Gagné, 2019). Motivation is closely related to job satisfaction, which contributes to workers' retention at their jobs over time (Welch & Brantmeier, 2021). Retention of the work force reduces recruitment, hiring, training, and orientation costs, as well as vacant posts (Bonenberger, et al., 2014).

Previous studies have shown that CHWs' intrinsic motivation emanates from autonomy, recognition, respect, self-efficacy, experience, social responsibilities, and commitment, while it is discouraged by poor working conditions, lack of recognition from other health professionals, unfavorable working conditions, and poor remuneration (Kaphle et al., 2016). Understanding and addressing these issues will ensure that community health worker programs are effective and sustainable through setting goals, identifying training needs, and appraisals through the PEM.

When the three fundamental needs of SDT (autonomy, competence, and relatedness) are met, and work contexts are structured, employees are able to experience autonomy in their work, feel a sense of mastery and self-efficacy in accomplishing work tasks, and experience meaningful connectedness with colleagues. Therefore, individuals are more likely to have autonomous

motivation in their work performance (Deci & Ryan, 2000). This suggests the critical need to better understand the context and conditions in which CHWs work in order to support them in improving their performance and realizing their potential from their own perspective (Kok, 2011), which is especially relevant for U.S.-based CHWs due to the lack of relevant prior research. Therefore, the purpose of this exploratory research is to investigate the motivation of U.S.-based CHWs through the use of qualitative methods and to develop recommendations for recruitment, training, and professional development of CHWs.

Methods

Qualitative Approach

Qualitative research is particularly useful when it is desirable to investigate less well understood phenomena by soliciting insight from those with direct experience in the topic of interest. Although qualitative inquiry is often associated with a conceptual framework, which may include theoretical constructs needed to define the issue of interest and frame data gathering methods (Saldaña, 2015), qualitative research builds theory inductively based on qualitative data to offer in-depth understanding of the ways people come to understand, act, and manage their day-to-day situations in particular settings (Shaw et al., 2017). These attributes make qualitative research well-suited to address the purpose of interest.

For this descriptive qualitative study (Sandelowski, 2000), explorative and interpretative approaches to data gathering and analysis were combined to gain insight into community health workers' (CHWs') experiences. The specific data gathering method used was focus group interviews, which allowed for gathering retrospective, narrative information from participants while encouraging further reflections on perspectives in the context of peers' convergent and divergent views (Krueger & Casey, 2014). According to Gundumogula and Gundumogula

(2020), focus groups offer the advantage of spontaneous interactions and common reflections which can enhance new insights into topics and yield enriched range and type of data compared to individual interviews.

Participants

Focus group participants were recruited from Pathways HUB Community Action Community Action (CA PCH), in Akron, Ohio. CA PCH contracts with fifteen Care Coordination Agencies (CCAs) which employ CHWs. CHWs within each CCA provide support to address social determinants of health by connecting at-risk individuals to social and health services. The functions of the PCH are to centrally track the progress of individuals to avoid duplication of services, to address barriers and problems as they arise, monitor the performance of CHWs to support payments for their work, improve the health of vulnerable and underserved populations, and to evaluate the overall performance of the CCAs to support payments, promote continuous quality improvement, and secure additional funding. Each CCA has three to five full time CHWs. Due to varying schedules and CHW availability, each focus group included three to five CHWs from one of the fifteen CCAs, which provided unique groups and diverse experiences of different working environments and client experiences.

Focus Group Process

A semi-structured focus group guide was developed to reflect the research aims and address the research questions. A draft version was provided to the dissertation advisor for review and comments, and minimal changes were made for clarity. The final interview guide included questions about participants' motivation to work as a CHW. Other relevant areas covered included participants' training and certification for the Ohio Board of Nursing, PCH Model and documentation, challenges and barriers within the role, available or lack of resources

required to support their work, expected caseload and other duties within the role, additional reflections, and overall satisfaction.

Seven (7) focus groups took place between 2021 and 2023. In 2021, three (3) focus groups were conducted with three to five CHWs, and the average interview duration was 60 minutes. Following the disruption and changing circumstances associated with the COVID-19 pandemic and the importance of ensuring information was gathered to reflect typical working conditions, in 2022 and 2023, two focus groups were repeated with the same participants. The average time for the focus groups was 60 minutes and moderated by the investigator. The focus groups were conducted virtually using the Zoom platform.

Ethics

A university institutional review board approved the interview research project. See Appendix B. Written consent wording was sent to the participants and signed prior to the virtual focus group meeting. When focus groups took place, participants were also asked to provide verbal consent to have their responses recorded, transcribed, and analyzed for aggregate trends or themes. The verbal consent from each participant was recorded via chat or verbal response before the recording.

Data Processing

Interviews were audio recorded using the built-in functions of the Zoom video and audio-conferencing platform. The recorded files were stored in a secure network drive. The audio recordings were transcribed from the video and audio-conferencing, verbatim. These files were securely deleted following transcription. Participants' identifiers, such as name, agency of affiliation, and other organization names, were removed and substituted with generic labels. During the focus group interviews, the moderator requested clarification for acronyms and

abbreviations to the extent possible. During the transcription process, remaining undefined acronyms or abbreviations, interruptions, inaudible segments, and crosstalk were included to the extent possible based on the subject matter knowledge. The recordings and transcripts were reviewed and edited substantially for accuracy. The researcher re-checked the transcripts after completion by listening to each audio recording one additional time while using a cursor to follow each typed word.

Data Analysis

Descriptive qualitative research is not limited to a specific approach to data analysis (Sandelowski, 2000). Therefore, analysis processes used in this research were driven by the need to address the aim through identification and development of themes running through the data which contribute to understanding CHW motivation and associated factors and can be considered within the framework of SDT. Data analysis followed a general strategy of engaging in cycles of coding to develop higher order categories and themes (Saldaña, 2016).

The transcription process can be seen as the first step in analysis as it promoted intense familiarity with data interpretation in methodology and theoretical thinking (Lapadat, 2000). A combination of Quirkos (2023) data analysis software and Microsoft Excel were used to facilitate data analysis.

Focus group text transcriptions were initially analyzed with Quirkos through application of multiple cycles of codes. A code in qualitative inquiry is a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data (Saldaña, pg. 4). In the first cycle, open codes, or brief summarizing words or phrases developed by the analyst during the coding process and based on the data itself (Gibbs, 2007), were applied. Open codes were organized by frequency,

similarities, differences, patterns, and recurrence using functions within Quirkos to be further examined and compared in the following cycle.

Pattern coding was applied in the second cycle to develop higher order categories, themes, concepts, and/or theoretical organization from the first cycle codes. According to Saldaña (2016), a pattern is a repetitive, regular, or consistent occurrence of action ordata that appear more than twice.

Second cycle codes were next exported from Quirkos into Microsoft Excel for use of program functions to organize and reorganize codes into a smaller number of sets more efficiently. Subsumption, abstraction, polarization, contextualization, numeration, and function methods of clustering units into larger units described by Smith et al. (2022) were used to reorganize, combine, create new, or reassign the codes into two code categories – descriptive codes and process codes. Descriptive codes are summaries of words or phrases, which lead primarily to a categorized inventory, tabular account, summary, or index of the data's contents (Saldaña, 2016). In contrast, process code uses gerunds ("-ing" words) to connote action in the data (Charmaz, 2002, cited by Saldaña, 2016). The combination of descriptive and process codes provided themes that were both informative and dynamic. Final second cycle codes developed in Excel were imported and revised in Quirkos for ease of reorganization and associating excerpts with broader themes. Figure 7, reproduced from Saldaña (2016), illustrates the general process of moving from code to theory.

Quality Control

Several steps were taken to ensure developed results were credible and trustworthy (Lincoln & Guba, as cited by Flick, 2007). The process of exporting from Quirkos into Excel and

back again ensured the thematic structure was substantial enough to convey meaning while being fully evidenced by the raw data. Other quality control processes included:

- Retaining data from all stages of analysis to demonstrate processes
- Creation of memos and notes to document decision processes
- Exchanging comments on thematic structure with the dissertation advisor
- Ensuring all developed themes were supported by one or more excerpts

Results

The results of qualitative data analysis are presented by theme and illustrated by one or more representative excerpts. The themes are organized in four sets, associated with described research aims. Table 2 shows themes, subthemes, example codes, and example excerpts.

Figure 7

From Codes and/or Categories to Theory (Saldana, 2016, p. 14).

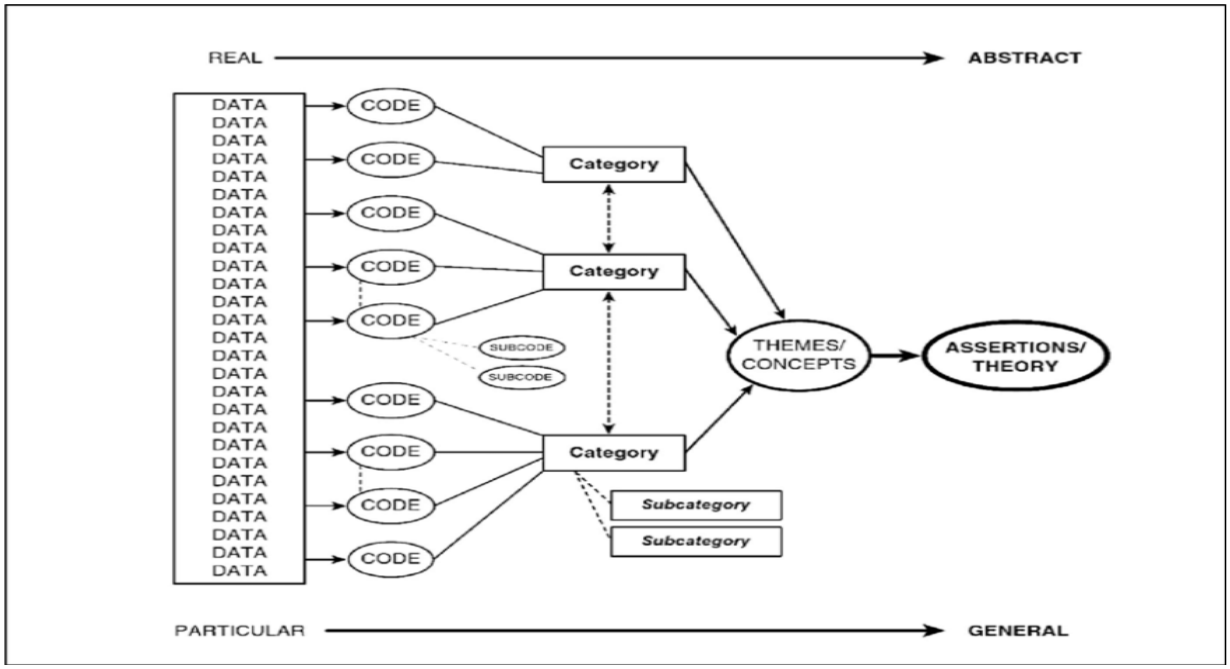


Table 2

Themes, Subthemes, and Examples of Codes and Excerpts

Example excerpt	Example Code	Theme	Subtheme
"I understand the struggle in daily living."	Having experience with community resources	**Preparing for CHW Role**	Having a history as a client
			Being fulfilled in the CHW Role
			Accessing community resources
			Applying personal experiences to CHW role
"Sometimes it's a bit difficult for me to make sure that all of my clients get their needs met."	CHWs working continuously	**Navigating CHW Role**	Experiencing Challenges Associated with the COVID-19 Pandemic
			Experiencing challenges related to pay
			Serving high-risk populations
			Continually working
			Integrating in the health system
			Investing time to build rapport
"I actually went into the schools and helped the kids understand health disparities."	Understanding social determinants of health	**Thriving in CHW Role**	Encouraging behavior changes through lived experiences
			Applying motivational interviewing skills
			Offering empathy, compassion, and building trust
			Providing services for diverse populations
			Learning quality improvement
"it was informative, educational . . . it's been a very interesting journey."	Educators and mentors	**Reflecting on CHW Role**	Pursuing other avenues to career growth
			Experiencing intrinsic and extrinsic motivation
			Being part of a peer group as a training resource

Preparing for the CHW Role

The first set of themes describes preparing for CHW role. These themes were developed from the data to be consistent with the three fundamental needs of Social Determination Theory - autonomy, competence, and relatedness (Deci & Ryan, 1985. These themes include having a history as a client, being fulfilled in the CHW role, accessing community resources, and applying personal experiences to the CHW role.

CHWs often have cultural beliefs, chronic health conditions, disabilities, or life experiences similar to the people in the community they service. This puts them in a unique position to help improve access to, quality of, and cultural responsiveness of service providers. CHWs typically work with communities experiencing health inequities and perform activities, such as outreach, community education, informal counseling, social support, and advocacy.

Having a History as a Client

CHWs come to their work with a passion resulting from lived experience of some of the same challenges faced by those they serve. One participant described their previous and current experiences:

> I have been a community health worker since I was about six years old, realistically speaking. I just wasn't getting paid for the work that I did. I'm the product of addiction on both sides of the family, a lot of violence, a lot of crime. So therefore, I ended up having to raise my siblings and became a teen mother at a very early age.

Other participants described their previous experiences as clients. One stated, referring to a mentoring CHW, “she educated me so much and, you know, provided me with resources that I could benefit from.” Other CHWs are still struggling with the same needs as their clients. This can present additional challenges. One participant described such a scenario, “I'm dealing with X, Y, & Z and. . . I'm supposed to wake up every day and make these contacts with these patients and give them all these resources that I might not qualify for...”

Being Fulfilled in the CHW Role

CHWs described their role as fulfilling, being passionate about their work, feeling a sense of contentment, and feeling successful when the needs of the families they serve were met,

which families demonstrated by increasing independence. As an indicator for autonomous motivation in their work performance, CHWs expressed their fulfilment in outcomes of their support to the community. Speaking about the program participants, one CHW said, "As long as I know I'm able to help . . . ten moms out then I feel good about that, and then I just keep on going." Another explained that despite the challenges to being in the role, "the pros outweigh the cons." CHWs find pleasure when they support the most vulnerable populations to gain self-sufficiency as described here: "I'm just happy to see them being able to get out of the shelter and settle."

Accessing Community Resources

Effective CHWs are highly knowledgeable about community resources to meet their clients' needs. "I'm connected with [organization] that supply me a lot of stuff like food. Anytime, if I tell them . . . 'I need this for my clients, . . .they tell me . . . 'Come any day, you'll get what you need.'" Another CHW explained, ". . . I've been able to help clients get housing . . . and they've already applied for low-income based housing, and then I'll give them other applications to maybe low income-based housing that's not through AMHA or Section 8 based." CHWs are deeply rooted in understanding the need of their clients: "Some of [the resources I need], I have already in my stock . . .[and] I go to my stock or my balance and get them what they need, like diapers, like clothes."

Applying Personal Experiences to the CHW Role

Personal experiences proved to be a useful source of knowledge and experiences for CHWs as they educated and advocated for clients to gain access to social and health services. One CHW recounted how needing social services inspired her to help others:

> The question I asked myself was, why would I be good enough to be one? And I think the answer to that is having lived experience with chronic health issues and encountering social determinants of health in so many different forms and capacities throughout my life.

Navigating the CHW Role

The second set of themes were the accounts of CHWs on how they navigate their role. These themes include experiencing challenges due to pre and post pandemic changes, experiencing challenges related to pay, serving high risk populations, continually working, integrating in the health system, and investing time to build rapport.

Experiencing Challenges Associated with the COVID-19 Pandemic

The pandemic exacerbated the already myriad of health disparities as clients experienced additional burdens due to lack of food, housing, transportation, and access to the internet. The suspension of home visiting and loss of face-to-face interaction with clients crippled the CHWs' ability to conduct clients' needs assessments in order to support them. Nevertheless, CHWs sought innovative approaches including virtual meetings, phone calls, and face-to-face meetings at public places, such as libraries, while adhering to social distancing guidelines.

CHWs reflected on how the pandemic affected their work, with "people being pulled into programs for either contact tracing, clearly being pulled into doula, being pulled in other directions within your agency." CHWs expressed the heightened need for client support: "Everybody went through like a super crisis, like everybody lost their job at one time, kids were out of school at the same time," while emergent priorities impacted available funding: "One of the biggest challenges is all of the funding running out during COVID . . .we've lost all our rent assistance funding . . . food pantries offering delivery to clients have stopped."

Experiencing Challenges Related to Pay

Livable wages were identified as a major challenge CHWs face. CHWs decried being in the same predicament "in the same system" as their clients in terms of needing social and health support. One described, "I make enough to survive, but I also want to get food stamps with my clients. And I want to go to the same food bank with my clients because I'm just making it." They expressed concerns regarding high workload and poor pay in return. "Right now, I am doing the job of about four people," one stated. The frustration from poor pay led to another CHW wanting to move on professionally, stating, "I am surviving, and I'm not thriving. So, I need to do something else."

Serving High Risk Populations

The CHWs highlighted complexities for the clients who have the highest risk of lacking basic social and health needs.

> And I see anywhere from 15 to 20 patients, and I supply food to those families and maybe other resources. So, with all of that, I actively help get them connected to car seats, cribs, a pack and play, food, formula, help them get connected to housing resources, help get them into better women's shelter, depending upon their situation. Helping with children's services issues, school issues for their children, a lot of case management.

Due to the "high-risk" nature of their clients, sometimes CHWs are unable to follow through with the services provided. One CHW described, "I did have one specific client where I

gave her everything that she needed to have to actually be okay within the system and she ended up never going."

Continually Working

CHWs reported working long hours, including weekends, to meet their clients' needs. CHWs are accessible to clients when no one is available, including social service agencies or even family. One CHW expressed the need for their supervisors to understand CHWs' work and accessibility to clients is beyond the typical working days and hours, asking, "How do we get our supervisors and the powers to be to understand that everything can't be Monday through Friday, nine to five, because that's not when real life happens?" Another CHW noted, "The two babies that we did lose in the course of the three and a half years I've been a Summa employee [happened] in the evening and on the weekend." Because of the fear of what might happen to their clients, CHWs end up availing themselves to the clients even after hours. "It's an unbelievable job that everybody is doing to commit their time to help their clients . . .it's [being] available all the time."

Integrating in the Health System

CHWs described some of the structural challenges due to lack of recognition as a part of the care team and support for their clients. One CHW characterized their unrecognized efforts as "a very vital role in connecting the community to the medical professionals." Another CHW described their perceptions about how they are viewed within health systems: "…they think you don't have as much value or worth that you're bringing to the table." Another CHW explained how services are not valued in the same way: "The nurses here at our hospital got a $2.50 raise and I got 32 cents because we are considered your administration staff; we're not considered helping patients when that's what I do all day long. . ."

Investing Time to Build Rapport

One of the most important skills that CHWs have is the ability to form a healthy rapport with their clients. CHWs invest their valuable time and listening skills to understand individual client needs: “So, sometimes you can't call a thousand people a day because you have that one that really, really needs your help.” CHWs devote time to assess the needs and initiate the respective Pathway for each need to track the outcomes.

> I had a client, she was going through a lot of stuff and just the stuff that she was talking about, I sat with her for two whole hours. Yeah, I was able to, you know, open a couple pathways, do some couple educations, tell her about some resources, but most of the time me talking to her was just helping her cope through whatever she was going through.

Thriving in the CHW Role

The third set of themes demonstrated CHWs’ competency relating to teaching skills, building capacity, advocacy, and service coordination. The themes included encouraging behavior changes through lived experiences, applying motivational interviewing skills, offering empathy, compassion, and building trust, providing services for diverse populations, and learning quality improvement.

Encouraging behavior changes through lived experiences

CHWs shared how they used their lived experiences to encourage behavior changes for their clients: “For me, it was my own experience being a single mother and having to navigate applying for all the services and finding all the resources that I needed.” Others live and work in the same community with their clients: “I have clients that live probably right around the corner from me. I'm seeing them in a grocery store and we're just going through the same issues.”

Another started their work of caring for others in a refugee camp: “I saw a lot of people missing care and I devoted myself to help them, like taking them to the hospital, trying to connect them with some of the resources that were around in the camp.”

Applying Motivational Interviewing Skills

CHWs have received and utilized motivational interviewing skills in their role, allowing participants to freely and openly discuss questions or concerns about healthcare. One described, “Motivational interviewing was a serious game changer for me personally. Those skills and tools are applicable in every aspect of your life . . .being able to effectively communicate with other human beings is a must.” Some relied on formal training, some learned from peers, and for others, formal training improved a skill they naturally possessed. “I think [it is] just really asking those necessary questions and allowing your patients or clients to just speak.”

Offering Empathy, Compassion, and Building Trust

Trust in the community is an important asset in linking community to health systems. One of the CHWs’ social functions is building trust with the community by offering empathy, compassion, and building rapport with their clients. One described, “...not pushing them too far if you can feel that it's an uncomfortable topic, showing empathy and reassuring them.” CHWs consistently cited these values as the key to success in their roles. According to one CHW, “The only one word I can think of is when it comes to community health work is compassion.”

Providing Services for Diverse Populations

Pathways HUB CHWs address the health needs of targeted Medicaid and Medicare participants who are pregnant, pediatric, adolescent, and have conditions or complex chronic conditions, behavioral, and physical health needs. One CHW who is the second generation of an immigrant family, gives back to their community by providing interpretation to address language

barriers. They described, “I’m the only child of a single immigrant mother, so the language barrier has always been something that I've seen firsthand.” CHWs are assigned clients in various programs, including re-entry programs. “I'm . . .working with women who are pregnant, who are incarcerated, and trying to connect to them with services, provide education… trying to find help for when they come out, or if they come out.” CHWs also describe how health and racial disparities in public health drew them to their role. “When I became aware of the astronomical number of Black women and babies that were dying in childbirth, that's when I wanted to pivot and come into this field.”

Learning Quality Improvement

Data collection and documentation in electronic health records is key to the success of the CHW role. The HUB’s quality improvement plan provides feedback on the completeness of the required documentation monthly through scorecards. CHWs find the feedback system supportive of their work as a form of reminders and opportunities for improvement. “I would say the monthly scorecards are very informative… I appreciate the feedback because if I don't know if I'm doing something wrong or doing something right, or if I need a little bit more education on how to complete the pathways, it's very helpful to me.” One CHW said the scorecard quality improvement process is like “smoke detectors, that signifies danger of fire” by promptly identifying and correcting deficiencies in documentation.

Reflecting on CHW Role

The fourth and final set of themes captured CHWs' reflections on their motivators. These themes included pursuing additional avenues to career growth, experiencing intrinsic and extrinsic motivators, and peer groups as training resources.

Pursuing Additional Avenues to Career Growth

In addition to acquiring a wide range of experiences and skills, CHWs value the importance of formal education and career advancement. Many have taken additional certification courses and continued education to maintain their OBN certification and advance their career. One current CHW chose to leave a well-paying job which did not support their goal to complete formal education. “I had a really good paying job. . . and I had to quit because they wouldn't let me finish school. So, then I joined AmeriCorps [making less money but receiving educational support]...and they offered it to me to become a community health worker while I was in their program.” Others have completed certifications to enhance their CHW professional practice, including lactation consultant, certified grief recovery specialist, and graduate degrees, such as a Masters in Social Work (MSW).

Experiencing Intrinsic and Extrinsic Motivation

CHWs shared their motivation to do their work based on their personal attributes or intrinsic motivators, and their environmental or extrinsic motivators. One described the CHW role as transcending the notion of a career: “I know this is a calling for me. . . this is much greater than a paycheck . . .that’s what motivates me . . . "

Another CHW described how addressing environmental/community needs was motivating:

> For me, it's just pretty much that I serve women just like myself. I'm from, of course, the community. I live in a community. I have clients that live probably right around the corner from me. I'm seeing them in a grocery store and we're just going through the same issues. But I guess what helps is the fact that if I learned of more resources, better support them.

Being Part of a Peer Group as a Training Resource

CHWs provided insight into how their training for Ohio Board of Nursing (OBN) certification and the Pathways HUB Model was motivating. According to one, the training "helped reignite the spark of helping." The HUB Model training provided an opportunity for mock interviews with peers and practice in service delivery scenarios. CHWs also participated in various opportunities to network with peers in other counties. Some CHWs networked with other agencies in monthly resource-sharing meetings, some participated in multi-county certification courses, and others met out of county peers through being certified. One observed: "It was just kind of nice to see that it was other community health workers out here and we're all doing the same thing, just in different counties."

Discussion

This descriptive qualitative research study, carried out through the use of focus group interviews, aimed to explore CHWs' motivation to perform their role. Unlike many other studies, this study did not assess the effect of CHWs on program health outcomes or effectiveness. Rather, it described CHW motivators and perspectives into their own role using their own words and provided insight into the unique role of CHWs in addressing social inequities for diverse, at-risk individuals in their communities.

The study was framed within the concepts of SDT and PEM described in the introductory section of this paper. Results could be categorized into four broad components of the CHW profession, presented as the themes: Preparing for the CHW role, navigating the CHW role, thriving in the CHW role, and reflecting on the CHW role.

Congruent with previous studies (e.g., Lucio et al., 2012), CHWs present passionate knowledge of social and health services within their community. This knowledge is acquired

through lived experiences and working with diverse populations, as well as being members of the communities they serve. Such knowledge is critical to promote health equity and improve health outcomes by serving as linkage between the community and healthcare system. In the theme *Preparing for the CHW role*, Pathways HUB CHWs emphasized their lived experiences as influential sources of inspiration for entering the field. CHWs also described lived experiences as factors contributing to advancement, responsible as much or more than formal education for their career advancement. This is consistent with findings reported by Smithwick et al. (2023). Smithwick et al. additionally reported CHWs value and advocate for opportunities to participate in leadership roles, mentorship, program design, and advocacy, and rated these things, as well as years of experience and community member feedback, as more important factors when considering advancement than formal education. This suggests CHWs value remaining part of the community or being interconnected, in contrast to some other professionals who look to the acquisition of credentials as a means of moving beyond their home community. Relatedly, Strachan et al. (2012) suggested community perception of ownership of CHW-facilitated programs is a predictor of success. Clearly, CHWs with an ongoing relationship with the community can enhance the perception of community ownership. These things also emphasize the importance of recruiting new CHWs from within communities as a preferred strategy when compared to recruiting individuals into CHW training and assigning them to communities based on need.

Many subthemes within the theme *Navigating the CHW role* spoke directly to challenges. These spoke to specific items such as high caseload, scarce resources, clients with complex needs, and varying expectations of their role. These sometimes-unsurmountable challenges were cited as the biggest frustrations that lead to burnout. Housing insecurities in Summit County for

HUB CHWs is a central issue in assuaging structural issues regarding the ability to address health issues. CHWs may serve clients who are homeless (i.e., having no place to live, sleeping on the streets or in shelters), "couch surfing" (living with friends), living in poor housing conditions, and facing evictions. However, despite facing entrenched system challenges in addressing social and health services such as housing, transportation, and access to health care, Pathways HUB CHWs consistently maintained that that they want to remain in the workforce and make an impact in their clients' lives rather than advance to other careers, consistent with the findings reported by Tshering et. al., (2019). Higher perceived capacity to provide care for patients/clients with social needs is associated with higher burnout for health care providers including CHWs (Telzak et.al., 2022; Tuyisenge et. al., 2019). CHWs experience burnout from the demands of caring for clients with complex social and health needs and may need training, awareness, and resources on how to navigate these complexities while maintaining self-care to prevent burnout. Devoting programmatic resources to support CHWs' work may reduce burnout and consequently high turnover rates and successful CHW programs.

According to Strachan et al. (2012), methods to address some challenges associated with workload include demonstrating an ongoing commitment to open communications between CHWs and management regarding CHW expectations and workload. This improves CHWs' sense of empowerment, even when faced with overwhelming challenges at times.

Despite the profound challenges associated with *Navigating the CHW role*, participants identified many ways they are *Thriving in the CHW Role*. Thriving for some CHWs means creatively recombining the lived experiences they brought to the role with skills acquired through CHW training and experiences accrued while in the role. HUB CHWs' findings were consistent with other findings that despite challenges faced in their work, CHWs want to retain

their identities rather than advancing to other helping professions (Anabui et al., 2021). As described in the Results section, for some CHWs, the profession is a calling more than a job, consistent with findings from Logan (2018) and from Ormel et al. (2019), who asserted intrinsic motivation was a key factor for paid and volunteer CHWs.

Viewed through the lens of Self-Determination Theory (Deci & Ryan, 1985), CHWs described competence with respect to performing job tasks which sometimes resulted from their own lived experience and other times from strategies developed over time while working in the profession. CHWs described threats to both autonomy and relatedness. Many CHWs described working long and non-standard hours, although this was characterized as a matter of choice rather than requirement, which illustrates a perception of autonomy. While CHWs valued relationships with their communities, some described the value of engaging with others, including those from other communities, to share experiences and empathize with others' challenges. CHWs also described a credibility gap experienced with interacting with medical professionals, who might not appreciate the contributions of CHWs due to the different nature of their training and professional practice when compared to health care providers. For some CHWs, being recognized as an authentic part of the client care team would provide another dimension of relatedness, beyond their ability to relate as a part of the community.

Given the dearth of qualitative research on CHWs' motivators and perspectives into their own role about their experiences, this research contributed unique insights from this workforce. The findings presented here retrospectively documented the lived experiences and specifically the challenges encountered by this specific group of CHWs. While CHWs described how they can creatively and competently often address structural barriers at the individual level, they clearly are not a panacea to attaining health equity, but rather key supporting actors for

overarching systemic change (Logan, 2018; Colvin & Swartz, 2015). Instead, as asserted by Colvin and Swartz, CHWs should be supported internally but should not shoulder the burden of ineffective programs and health care systems.

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Chapter 4: Manuscript III

Factors Impacting Community Health Worker Motivation and Performance: A Mixed Methods Research Study

Synopsis

The primary goal of Manuscript III was to explore levels of community health workers' motivation, job satisfaction, and performance.

The level of job motivation and associated factors for CHWs is not fully explored. The purpose of this study is to assess level of job motivation and associated factors among Pathways HUB CHWs in Summit County and all HUBs in Ohio.

CHW motivation can potentially affect service delivery. Low morale can undermine the quality of services, lead to burnout and consequently high turnover rates among the CHWs cadre. Accounting for motivation as key factor might affect successful interventions to improve Pathways HUB CHW implementation.

The manuscript that follows has been formatted following guidelines provided in the Publication Manual of American Psychological Association, 7th edition. This manuscript has not yet been submitted for publication.

Abstract

Background: There is focus in the U.S. on how CHW motivation might affect job performance and satisfaction. Motivated employees increase productivity and work engagement in organizations, promote employee retention, and lead to career growth.

Objective: The purpose of this study is to explore the key motivation factors CHWs consider important for boosting their performance, understand the neutral or less important motivators, explore how CHWs perceive both in diverse settings, and elucidate different strategies to increase CHW motivation/engagement based on the findings.

Methods: Mixed methods were used to explore the motivator and demotivator perceptions of CHWs locally using focus groups, followed by a statewide Motivator Assessment using a survey. Findings were compared to provide insight into key motivators and demotivators in diverse settings.

Results: Four primary themes were found to be consistent with five major motivator identities The Caregivers, The Achievers, The Thinkers, The Builders, and The Reward Driven. One or more themes supported one or more of 23 constructs/motivators of these identities. The findings support existing findings and add knowledge regarding potential benefits of focusing on motivating and demotivating factors.

Conclusion: This study adds to the knowledge of the potential benefits of understanding and supporting motivating factors/enhancers for CHWs as it crosscuts key identities which underpin their success. This study contributes to the current understanding of CHWs' well-being from their own perspective, highlighting homogeneity in diverse state and local environments.

Introduction

Community Health Worker (CHW) motivation is paramount to their performance as a critical aspect of quality of support and sustainability of programs. If CHWs are not motivated, then their performance is low, and thus programs will not operate successfully, which in turn, impacts community health outcomes. Therefore, two of the main functions for program managers and administrators are to understand CHWs' key motivators and to address associated barriers, such as lack of career growth, poor pay or incentives, adequate training, supervision, and integration into care teams to promote productivity and CHW retention.

Employee motivation is considered the driving force that enables the employee to perform their activities more efficiently and effectively, thus achieving the stated goals of the organization (Meena & Kumar, 2021). Therefore, motivation is considered an essential catalyst for the success of organizations, as it promotes employees' effective performance (Vo et al., 2022). When motivated, employees show more commitment to their job, become more engaged in their work, and work harder to meet the goals of the organization. Employee motivation increases productivity and work engagement in organizations (Zareen et al., 2015), and influences and enhances employee engagement (Tsvangirai & Chinyamurindi, 2019), productivity (Meena & Kumar, 2021), and employee retention (Naizm et al., 2021). In addition to being present at work, employees are required to be fully motivated in order to execute their responsibilities for work (Mamun & Khan, 2020).

Strong and relevant CHW training is an important factor for satisfaction, retention, and motivation (Ludwick, et.al., 2018). Continuous training and professional development have been associated with increased job satisfaction and motivation. Motivation assessment

may provide insight into workplace engagement and motivation tactics, identifying motivational shortcomings as they relate to individuals and teams. CHW motivation assessment can capture findings related to several critical factors:

Workplace safety, stress and anxiety - The most basic need for humans is to feel safe and secure. Understanding and addressing employee motivational needs increases employee productivity and morale, as well as physical and mental health. Pincus (2023) postulates that when safety motivation is operating there is a desire to gain the basic sense that one has the confidence, protection, and comfort to successfully grow as a person. At least twelve major theories of motivation include a need for safety as a core motive (Forbes, 2011).

Talent retention and development - Career development is a relatively low-cost way to enhance skills, encourage employee effectiveness, and provide challenge and variety. A lack of career development has become the number one reason employees leave organizations—a change from just a few years ago when pay topped the list.

Employee productivity – It is important to encourage employee effectiveness and output without causing burnout. Employees whose work is aligned with their motivators increase the amount and quality of their work.

Employee recognition - Lack of recognition is usually among the top three reasons for employee turnover (Tweedie et. al., 2021). Employees who receive recognition, including nonmonetary recognition, are more likely to be motivated. Motivated workers have higher retention rates because they experience higher levels of job satisfaction when their employers recognize their talents and skills (Herzberg, 1966).

Motivation Among Community Health Workers

The importance of motivated health workers in providing high quality health care has seen a growing emphasis. A survey from 29 countries ranked low levels of health care professionals' work motivation as the second most important health workforce problem after staff shortages (Mathauer & Imhoff, 2006). Lessons and experiences from stakeholders in a study conducted in Uganda to enhance performance and sustainability of CHWs identified challenges affecting CHWs and consequently driving poor retention and performance (Musoke et al., 2021).The study found one key challenge was unrealistically high expectations for CHW performance. Stakeholders felt that local leaders and communities had high expectations of CHW programs which, in turn, raised expectations of both funders and CHWs that many programs could not meet. These expectations included managing a high number of caseloads and being perceived as a solution for all prevailing health challenges in the communities.

Relatedly, inadequate support mechanisms posed challenges to performance and motivation, which led to high CHW turnover rates. CHWs faced challenges related to unsupportive systems from programs, and the wider health system was reportedly limited, which made CHWs less engaged in the activities of most programs, and demotivated them because they felt less valuable and unrecognized in their communities (Musoke et al., 2021).

The effect of poor motivation is closely linked to high attrition rates for CHW programs. Various reasons for high rates of CHW program attrition are well-attested and include inadequate support and supervision, poor recruitment processes, lack of continuous and refresher training, insufficient pay, lack of family and social support, sustainable opportunities in other fields, and lack of integration and recognition, among others (Ngilangwa & Mgomella, 2018; Ngugi et.al., 2018; Nkonki et al., 2011).

Higher intensity, supportive CHW supervision is acknowledged as an essential pillar to ensure CHW productivity, motivation, and understanding of the CHW role within an organization (Cometto et al., 2018; Naimoli et al, 2014). In a study conducted in India to examine the relationship between supportive supervision and CHW performance, greater intensity of supportive supervision that included sufficient monitoring visits by the supervisor, supervisor meetings, and training was associated with higher CHW performance (Gopalakrishnan et al., 2021). Results from a study in Uganda conducted to analyze qualitative evidence from CHW perspectives regarding seven program components associated with effectiveness concluded supportive supervision fostered a "virtuous" cycle contributing to CHW confidence, cohesion, referral effectiveness, recognition in the community, and a sense of connectedness to the health system—all factors linked to motivation (Ludwick et al., 2018).

U.S.-based studies focused on CHW program outcomes and the strengths and hinderances of CHWs in their role rather than motivation as a driver of performance. Therefore, identification of CHWs' motivators and demotivators was derived from what makes their jobs easier and the challenges they face. For example, a study conducted to understand the public health role, motivations, and perceptions of CHWs deployed to low-income housing in Richmond, Virginia, found that CHWs identified being highly motivated by helping people and derived joy from all situations in which they were able to help their clients. In the study, CHWs cited being able to help people and seeing clients get the resources they need as their favorite parts of their job (Obasanjo et. al., 2024).

Multiple U.S.-based studies identified numerous challenges faced by CHWs that were synonymous to demotivators. These included safety, poor pay, lack of professional

recognition, unrealistic workload, and a lack of resources, such as housing, transportation, and childcare for clients (Obasanjo et. al., 2024; Pittman et.al., 2020; Palmer-Wackerly, et. al., 2020).

Clearly, based on review of prior research and current employment trends, there is value in exploring current motivators among CHWs that have potential to impact performance, and, in turn, program efficacy. Additionally, studies on the factors that encourage work motivation can contribute to the theoretical foundations on the roots of individual and practical social conditions that optimize an individual's performance and wellness (Ryan & Deci, 2000; Vo et al., 2022). Therefore, the following are the aims for this research: (1) Explore the various motivational factors CHWs consider more or less important for boosting their performance (2) Suggest different strategies to increase CHW motivation/engagement by focusing on demotivating factors.

Methods

Mixed Methods Design

Mixed methods research is the type of research that combines elements of qualitative and quantitative research approaches for the broad purposes of breadth and depth of understanding and corroboration (Schoonenboom & Johnson, 2017). Reasons for use of mixed methods included: (a) *Credibility* – enhancing integrity of findings (b) *Context* – ability to consider internal and external validity of findings (c) *Illustration* – using one data type to illustrate the other (d) *Utility* – enhanced usefulness of findings (e) *Confirm and discover* – hypothesis development and assessing within a single study (f) *Diversity of views* – combining researchers' and participants' perspectives through quantitative and qualitative research, respectively, and uncovering relationships between variables through quantitative research while also revealing meanings among research participants through qualitative research (Bryman, 2006, p. 106).

Diversity of views can refer to diversity defined in various ways and is applicable in this study through the process of iteratively/sequentially connecting local/idiographic knowledge using data from Summit County Pathways CHWs, a distinct local group, with general/nomothetic knowledge using data from a broader Statewide CHW assessment (Schoonenboom & Johnson, 2017). The research itself was carried out through the use of an exploratory sequential design (Creswell & Plano Clark, 2011) where the first phase of qualitative data collection and analysis was followed by the collection of quantitative data to test or generalize the initial qualitative results.

Existing data were used to inform this research. Benefits of *data use* and *reuse* are well-established in research, stemming from the knowledge that all new research builds upon the discovery of previous researchers. *Data use* occurs when one individual or team collects data for research and explores it for a specific question. If the same individual returns to that same dataset later, that is another use, as the dataset is still embedded in the creators' context (Pasquetto, Borgman, & Wofford, 2019). *Data re-use* implies the usage of a dataset by someone other than the originator (Pasquetto, Randles, & Borgman, 2017). In this study, the use of secondary analysis of qualitative data from previous study (*use*) and quantitative survey data from Motivator Assessment (*reuse*) reaps the benefits of further exploration and examination of the outcomes with a different method. The *use* and *reuse* of data includes: 1) Research continuity – exploring new perspectives, 2) Boosting research visibility – insight into projects that had been previously published but had left the scholarly communities' attention, 3) Exposes data to new tools, methods, and approaches – discovery of new methods, tools, or approaches, and 4) It contributes to research evaluation to improve methods, results, and communication of new findings (Emerson, 2020).

Context of the Study

The Pathways Community Hub Institute® (PCHI, n.d.) Model helps communities build a transformative and sustainable community-based care coordination network. The model was originally designed to strengthen CHW work in serving underserved communities, as CHWs are uniquely able to engage community residents at risk for poor health and social outcomes. The PCHI Model provides training and tools for CHWs to identify client risk factors and work towards eliminating those risks one by one. The model provides the infrastructure to track risk factors from identification through mitigation and link payment directly to outcomes. The PCHI Model is a quality improvement framework for communities to build their own robust network of community-based care coordination in partnership with local stakeholders to align resources and achieve positive outcomes.

Community Action Akron Summit PCH is one of 12 Pathways Community Hubs (PCH) in Ohio. Each PCH is certified to serve a designated geographic location, typically county or region, to avoid duplication of services. Community Action Akron Summit is the fiscal and administrative agent for the PCH that serves Summit, Portage, Wayne, and Medina Counties in Ohio. There are 15 contracted Care Coordination Agencies (CCAs) in the network who employ 25-30 certified CHWs. Community Action PCH implements the PCHI model to address social determinants of health in the region to reduce high rates of infant mortality, especially among those at increased risk from factors including racial or ethnic minority status, chronic disease and mental illnesses, including substance use disorders. High-risk individuals are identified through referral partners and enrolled in the program. CHWs engage those individuals beginning with a comprehensive risk assessment. Each risk factor is translated into a *Pathway*. A *Pathway* serves as a tracking tool specific for each identified risk factor and evaluates whether or not the final

outcome has been achieved successfully (need addressed) or closed incomplete (unable to resolve the risk factor). Some examples of *Pathways* include education, housing, behavioral health, and social services.

Qualitative Data

This study included a secondary analysis of qualitative data from a previous study (see Manuscript II) where seven focus groups with 12 CHWs from Community Action PCH were held to understand the top factors for CHW motivators and demotivators. Motivators were assessed from the responses to two specific interview questions: "What motivates you to be a CHW?" and "What are the challenges you face being a CHW?" Please refer to Manuscript II for additional details on design and data processing.

Quantitative Data

A statewide motivational assessment was administered for 12 Pathways HUBs. Data were gathered using the Motivator Assessment (MA), an online assessment in which each respondent is presented with 96 paired responses to the question "I am more motivated by...." The responses are placed as if anchoring opposite poles of a continuum. The respondent chooses the preferred response and indicates strength of preference. Each response contributes to scoring for a specific motivator (Elton et al., 2018).

The MA provides a ranking of 23 motivators distributed across five identities. The motivators are unique, fundamental drivers that all human beings have in common. The nuances in an individual's specific nature are revealed not only through which specific motivators are most important to them, but also the particular order of priority from 1 to 23. Motivators that are linked closely to others comprise a group of motivational "types" that have commonalities. These are: The Thinkers, The Builders, The Reward-Driven, The

Caregivers, and The Achievers. (Motivator Assessment Technical Manual, 2018). Table 3 shows types with associated motivators.

Survey links to the MA were distributed to CHWs for a fifteen-minute self-assessment through *Find Mojo,* an online platform source for employee motivation information *(https://findmojo.com).* Deidentified data with responses for 150 distinct CHWs from 12 Ohio PCHs informed this research. Specific data consisted of each CHWs top motivators and five identities. Scoring consists of compiling the number of times the rankings for the 23 fundamental drivers was categorized as *Strong, Moderate*, or *Neutr*al. These rankings were considered in the context of the five identities formed from clusters of motivators.

Table 3

Ranking Motivators 1-23 Across Five Identities (Elton, et.al., 2021).

1. The Thinker	2. The Builder	3. The Reward-Driven	4. The Caregiver	5. The Achiever
Autonomy	Developing Others	Money	Empathy	Challenge
Excitement Variety	Friendship	Prestige	Family	Excelling
Creativity	Purpose	Recognition	Fun	Ownership
Impact	Service			Pressure
Learning	Social-Responsibility			Problem- Solving
	Teamwork			

Qualitative and Quantitative Samples

The qualitative data and analysis used were derived from 12 focus group participants recruited among CHWs from Community Action Akron Summit PCH. The quantitative analysis was from a sample from 150 surveys among CHWs from 12 Ohio Pathways HUBs serving diverse communities in Ohio (Summit, Stark, Mahoning, Cuyahoga, Lucas, Tuscarawas, Dayton, Mansfield, Toledo, Columbus, Lorain, and Corporation for Ohio Appalachian Development).

In comparison, both CHW samples share similarities but are also unique and bring diverse perspectives to the aims of the study. All PCH CHWs perform their duties under the national evidence-based PCHI model to improve health and care for clients by addressing social determinants of health, use the same documentation software, require OBN certification, were recruited from their communities, understand community needs and resources, and have shared experiences as clients, among others. Both samples serve diverse populations in rural and also metropolitan areas, are employed by various agencies (hospitals, federally qualified health centers, community-based agencies, faith-based, mental health providers, local health departments, etc.), and serve various at-risk populations (maternal and children, children, adolescent, geriatric, re-entry, chronic disease prevention and management, etc.).

Qualitative Data Analysis

Interviews were audio recorded using the built-in functions of the Zoom video and audio-conferencing platform. The audio recordings were transcribed from the video and audio-conferencing, verbatim. These files were securely deleted following transcription. Participants' identifiers, including name, agency of affiliation, and other organization names, were removed and substituted with generic labels. During the focus group interviews, the moderator requested clarification for acronyms and abbreviations to the extent possible.

During the transcription process, remaining undefined acronyms or abbreviations, interruptions, inaudible segments, and crosstalk were included to the extent possible based upon the subject matter knowledge. Generated transcripts and recordings were compared, and transcripts were edited substantially for accuracy. Data were coded in cycles until condensed into prevalent themes and subthemes. Additional details about qualitative analysis are available in Manuscript II.

Quantitative Data Analysis

From 150 respondents, motivator patterns were identified. Each of the 23 motivators was assessed by multiple items. Based upon clear patterns and steep drop off (many motivators were selected 0, 1, or 2 times), the top five items describing the strength of motivator were identified, other than moderate motivators where a tie score resulted in a top six highest ranked items. One motivator was frequently identified both as a strong and moderate motivator. All other ranked motivators were unique within the associated strength category.

Integrated Data Analysis

Data analysis of previously gathered focus group responses and CHW responses to the MA were informed of the reported results. Two main themes and associated subthemes developed from the focus group analysis in the previous study were reassessed to emphasize motivating factors and compared with results from the MA.

Results

Quantitative Results

Other than empathy, which was selected as a strong motivator by 18 respondents and a moderate motivator by 11 different respondents, the top ranked motivators within strong, moderate, and neutral categories are all unique. The top five strong CHW motivators (family –

34, impact – 19, empathy – 18, learning – 16, purpose – 8, and social responsibility – 7) correspond with The Caregivers (58), The Builders (27), and The Thinkers (11) identities in ranking order. The top six moderate motivators (developing others – 16, social responsibility – 13, friendship – 12, empathy – 11, service -– 10, and Challenge – 10) correspond with The Caregivers (18) and The Builders (9) identities. The full list of motivators and scores is shown in the Appendix. The lowest five motivators (those most often ranked as neutral) included money – 56, prestige – 25, variety – 22, excitement – 9, and pressure – 7. These correspond with The Reward-Driven (4) and The Achievers (4) identities. Figure 8 shows the top five strong motivators corresponding with the Caregivers identity, Figure 9 shows moderate motivators corresponding with The Builders identity, and Figure 10 shows neutral motivators corresponding with The Reward Driven identity.

Figure 8

Strong Motivators

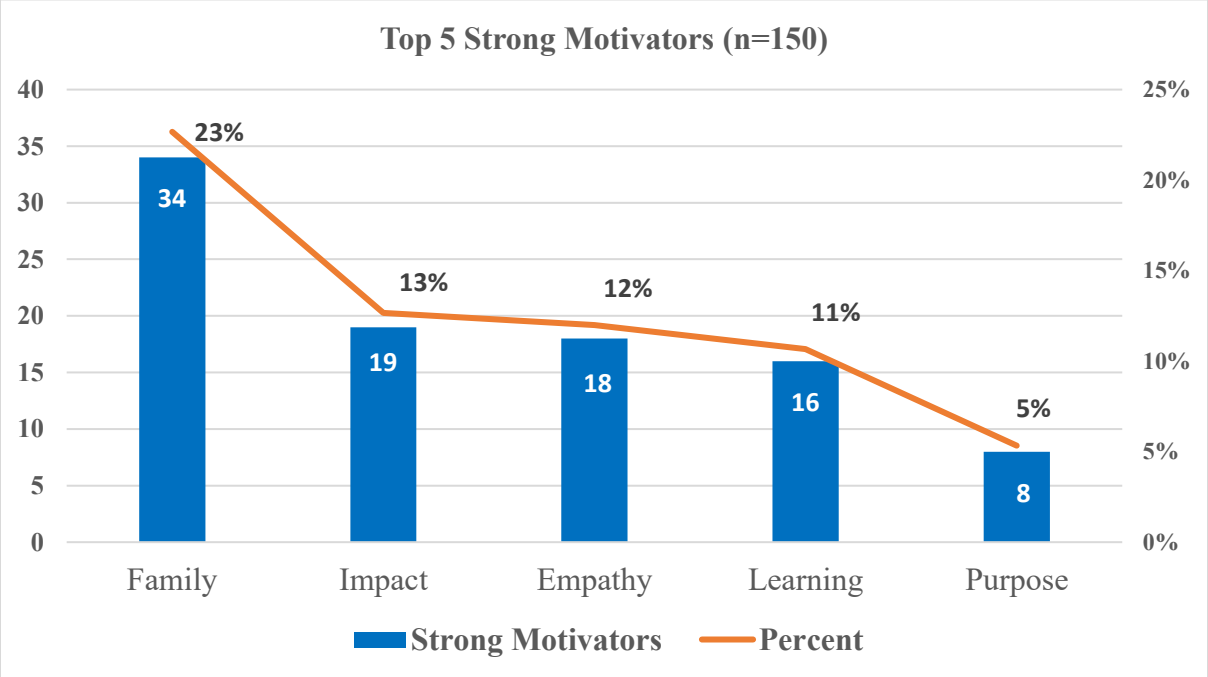
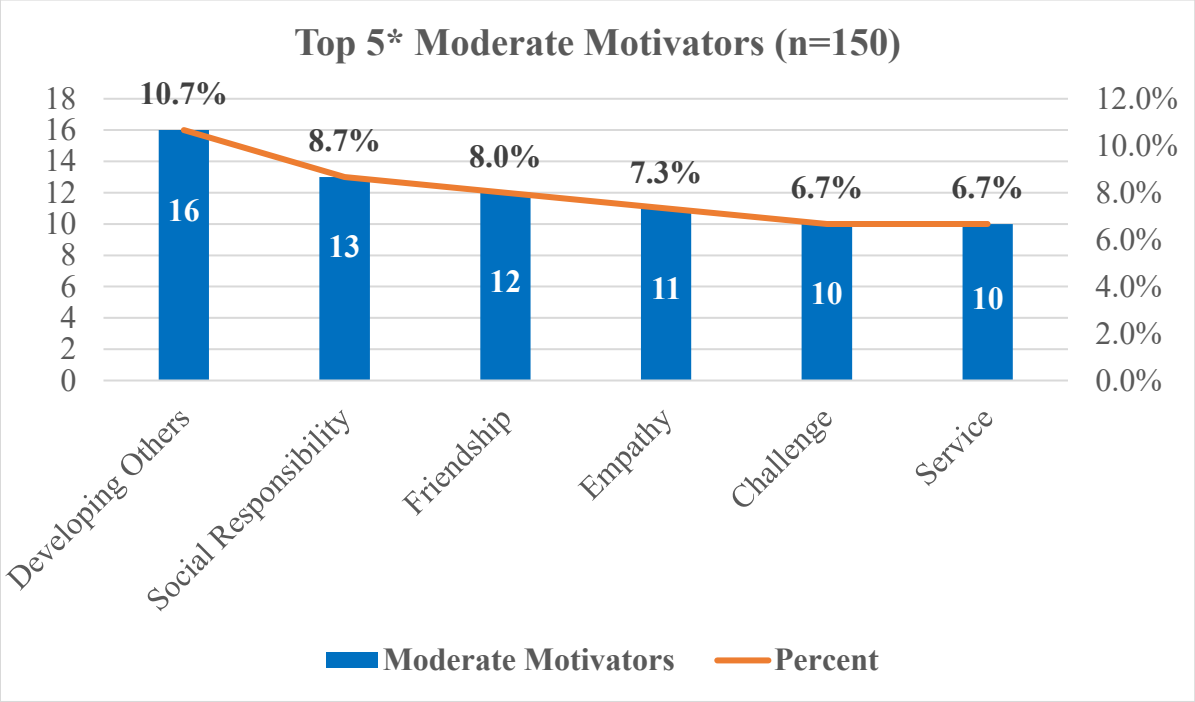


Figure 9

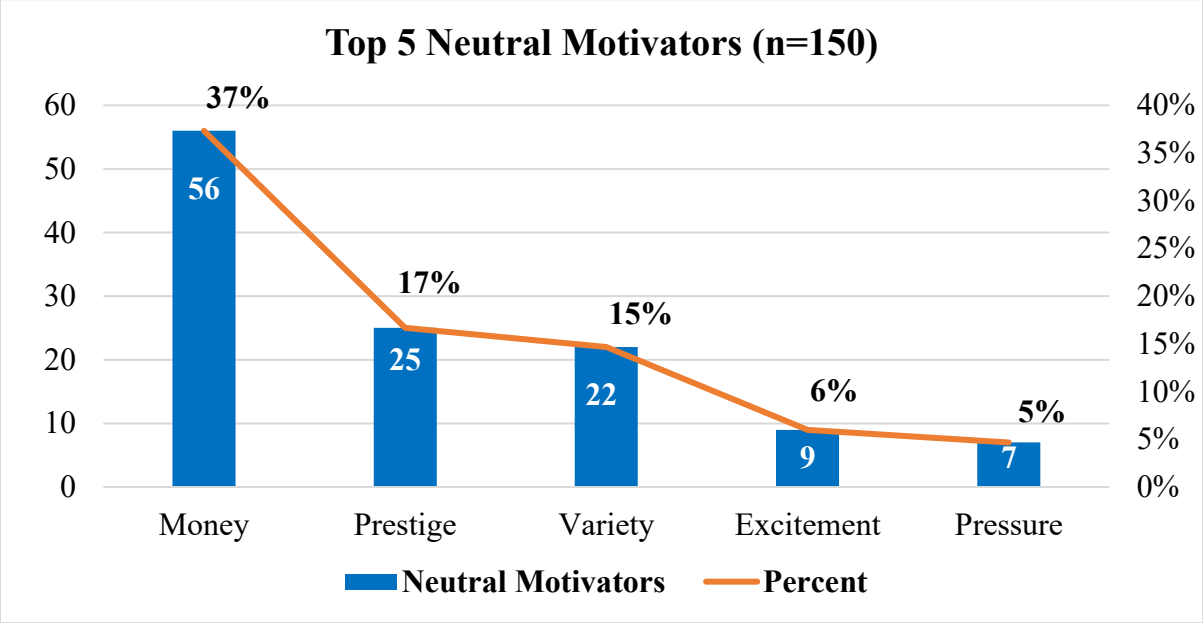
Moderate Motivators



(*) Two motivators (challenge and service) tied with scores of 6.7 percent.

Figure 10

Neutral Motivators



Qualitative Results

Table 4 shows themes and associated subthemes developed from qualitative analysis. Please refer to Manuscript II for additional details, including excerpts per subtheme.

Table 4

Themes and Associated Subthemes Developed From Qualitative Analysis

THEME	SUBTHEME
	Having a history as a client
	Being fulfilled in the CHW Role
PREPARING FOR CHW ROLE	Accessing community resources
	Applying personal experiences to CHW role
	Experiencing challenges associated with the COVID-19 pandemic
	Experiencing challenges related to pay
	Serving high-risk populations
	Continually working
NAVIGATING CHW ROLE	Integrating in the health system
	Investing time to build rapport
	Encouraging behavior changes through lived experiences
	Applying motivational interviewing skills
THRIVING IN CHW ROLE	Offering empathy, compassion, and building trust
	Providing services for diverse populations
	Learning quality improvement
	Pursuing other avenues to career growth
REFLECTING ON CHW ROLE	Experiencing intrinsic and extrinsic motivation
	Being part of a peer group as a training resource

Integrated Results

Table 5 shows the developed alignment between qualitatively derived themes, motivators, and identities formed from clusters of motivators. The developed alignment between qualitatively derived themes, motivators, and identities formed from clusters of motivators are

represented by one or more subordinate themes. The Caregivers identity of empathy and family constructs corresponded with CHWs being fulfilled in their role, serving diverse populations, and offering empathy, compassion, and building trust. The Thinkers identity of creativity, impact, and learning corresponded with the understanding community resources, applying personal experiences in their role, and applying motivational interviewing skills themes. The Achievers identity constructs of challenge, excelling, and problem solving corresponded with encouraging behavior changes through lived experiences. The Builders constructs of developing others, friendship, purpose, social responsibilities, and teamwork corresponded with encouraging behavior change through lived experiences, providing services for diverse populations, investing time to build rapport (interpersonal and relationship building), mentoring, and creating peer groups.

The Reward-Driven constructs of money, prestige, and recognition, which were ranked as the neutral motivators, corresponded with the challenges faced by CHWs in their role that included poor pay, continually working, experiencing burnout, lack of resources, high caseload, and serving high-risk populations. Contrariwise to strong and moderate motivators, CHWs did not perceive or represent the challenges they face as demotivators. For example, while acknowledging that they did not receive sustainable wages, they also indicated that their work is more important than the pay. *"I know this is a calling for me. Like this is much greater than a paycheck…,"* and their families and clients motivated them *"…being a single mother with them three teenagers, like I said, it's trying, but that's why I do it. That's what motivates me…"* Despite the challenges, CHWs were motivated when they impacted change. "I mean, it's very time consuming, but it's worth it in the end if I can actually help someone who I know is in dire need."

Table 5

Table 2: Qualitatively Derived Themes and Identities Formed from Clusters of Motivators

	Superordinate Theme	Subordinate Theme	CHW Identities	Identity Construct
Motivators		Providing services for diverse populations		**Empathy**
		Being fulfilled in the CHW role	The Caregivers	**Family**
	Preparing for CHW Role	Understanding community resources		**Autonomy**
		Having a history as a client	The Thinkers	**Creativity**
		Applying personal experiences to CHW role		**Impact**
		Applying motivational interviewing skills		**Learning**
				Challenge
		Encouraging behavior changes through lived experiences	The Achievers	**Excelling**
		Offering empathy, compassion, and building trust		**Pressure**
	Thriving in CHW Role	Providing services for diverse populations		**Problem solving**
		Providing emotional and social support		**Developing others**
		Investing time to build rapport (interpersonal and relationship building)	The Builders	**Friendship**
		Mentoring		**Purpose**
		Creating peer groups		**Service**
				Social responsibility
		Experiencing challenges related to pay		**Teamwork**
		Continually working		
		Experiencing burnout		**Money**
Demotivators	Navigating CHW Role	Experiencing challenges related to resources	The Reward-Driven	**Prestige**
		Experiencing challenges related to high numbers on caseload		**Recognition**
		Experiencing challenges related to serving high risk populations		

Discussion

This mixed methods research study aimed to understand CHW motivators and demotivators in a local context and to draw comparison from a statewide perspective. This section focused on insight gained from both qualitative and quantitative results and considered these results in comparison with existing research, in particular with regard to the highest ranked motivator identities. The results from open-ended, qualitative interview questions demonstrated strong alignment with pre-specified items included in the MA instrument. Additionally, lack of associated excerpts supports the finding of some extrinsic motivators, notably money and prestige, as being viewed as neutral or less important motivators.

The National Cancer Institute defines a caregiver as "a person who gives care to people who need help taking care of themselves" and provides the following examples: "Caregivers may be health professionals, family members, friends, social workers, or members of the clergy. They may give care at home or in a hospital or other health care setting" (NCI Dictionary of Cancer Terms, n.d.). The CHW role is well established as caregiving in different community-based settings in which CHWs serve. They are often characterized as natural helpers who support patients, researchers, health systems, and families (Cornell et al., 2009). According to Logan and Castañeda (2020), CHWs fill gaps in the provision of care to rural communities in the U.S. to confront health disparities using advocacy as a primary tool. Logan and Castañeda (2020) additionally argued that advocacy must be understood as a form of caregiving.

CHWs align with The Builder identity in their roles as community organizers. Across the globe, CHWs play a vital role in reducing health burden while significantly improving the

health and lives at the individual and community levels. In the U.S., CHWs play a pivotal role in bridging the gap between communities and health care systems by reducing potential barriers, such as transportation, translation, advocating for their community's health needs, and making referrals to social services, which are integral activities to promote self-sufficiency (Pérez & Martinez, 2008). CHWs can be a valuable resource for public health practitioners to increase the effectiveness of efforts in clinical and community preventive services. Across different settings, CHWs play diverse roles in large-scale programs and have functions related to both health education and helping to extend or bridge to primary healthcare services (Perry, et.al., 2021).

Bateman and Crant (1993) described the goal orientation as the active role-oriented temperament of individuals actively initiating changes and striving to influence the environment. This clearly aligns with The Achiever motivation identity. Working in resource-scarce communities, CHWs challenge themselves to find innovative ways to meet the needs of their clients. Motivated employees play an active role in their work, actively creating an environment, improving conditions, and seeking opportunities and information instead of passively waiting to be managed (Crant, 2000; Parker et al., 2010). Despite challenges related to scarce resources, poor pay, working as volunteers, and serving high-risk populations, CHWs serve as social agents, service extenders, and cultural brokers (Schaaf et.al., 2020).

The vital roles of CHWs in building and maintaining strong connections with communities and navigating organizational boundaries are vital to taking a systems-based approach to public health (Leischow & Milstein, 2006). CHWs are trusted members of their communities, which uniquely positions them to support their clients in sensitive decisions, such as vaccination during the COVID-19 pandemic (HRSA Maternal and Child Health,

2022). These innovative activities and orientations align with The Thinker motivation identity. For example, CHWs rapidly adapted their innovative models and service delivery when the COVID-19 pandemic exposed deficits in healthcare and public health systems across the globe. In the U.S., multiple studies of CHW-led programs demonstrated how CHWs were able to continue to engage families during the national shutdown throughout the pandemic and beyond 2022 (Roben et al., 2022; Traube et al., 2022). Locally, Pathways Community HUB CHWs in Summit County and other Ohio counties played vital roles in contact tracing, providing informal education about the virus symptoms and home remedies, encouraging social distancing, and providing virtual social support during the stay-at-home orders (Kirimi & Budnik, 2021).

The Reward-Driven identity, including money, prestige, and recognition, was a neutral motivator. While rewards or incentives have been reported as key factors that influence CHW motivation and performance, CHW motivation is sustained when CHWs feel they are a valued member of the health system and have a clear role and set of responsibilities within their organization. While CHWs presented the need for equitable pay, they also reported that "I know this is a calling for me. Like this is much greater than a paycheck." Consistent with findings from other research (Colvin et al., 2021), this suggests CHWs are best motivated by work that provides opportunities for personal growth and professional development, irrespective of the direct remuneration and technical skills obtained (Colvin, et.al., 2021).

This study demonstrated enabling factors and challenges for CHW performance from their perspective, which is critical in understanding the challenges CHWs face through focused efforts to manage workload and strengthen CHW support to bolster their recognition

and sustainability. Such programmatic emphasis can focus on enhancing the motivational factors found in this study to improve CHWs' experiences in their roles. The engagement of CHWs and improvement of CHW programs is critical to improving the care provided to the families and communities, along with building supportive systems to recognize the work done by CHWs and increase long-term sustainability. The study outcomes recommend the following interventions, which align with the 2018 CHW Assessment and Improvement Matrix (Ballard et al., 2018):

Supervision: Regular supportive supervision promotes skill development, problem solving, and performance review in three key areas. First, implementing an existing scorecard review where the supervisor provides a summary of statistics of a particular CHW's performance (e.g. number of home visits, number of Pathways) to the CHW to identify areas for improved service delivery leads to more positive outcomes. Second, providing technical support where a dedicated supervisor conducts monthly supervision visits that include reviewing reports and providing problem-solving support to the CHW allows frequent meaningful communication. Third, ensuring program director and supervisor support to CHWs allows the CHWs to address the community's needs (e.g., providing resources, referral support, higher level care, etc.) and implement services, as applicable. CHWs also reported that they experienced hardships and a need for resources, such as food and housing, just like their clients. This study recommends providing compensation to CHWs that is at a competitive rate relative to the respective market in order to prevent high turnover rates and ensure sustainable social services programs.

Opportunity for advancement: CHWs are provided career pathways. First, advancement is offered to CHWs who perform well and who express an interest in

advancement if the opportunity exists within the program or organization. Second, training opportunities are offered to CHWs to learn new skills in order to advance their roles. Third, advancement is intended to reward good performance or achievement and is based upon a fair evaluation that includes experiences and skills, additional training, certification, and job responsibilities. including peer support.

Resources/equipment and supplies: The availability of social and health services has led CHWs to express their frustrations and often burnout due to the lack of resources for clients, which include housing, food, transportation, employment, childcare, mental health support, and others. While CHWs are knowledgeable about the resources and how to navigate the complex system barriers, program advocates must be on the forefront of addressing those systemic barriers, including racial disparities, safe housing, transportation, access to nutritious food, physical activity opportunities, and access to healthcare, in order to access resources.

Integration in the health system: Policies that integrate and include CHWs in health system planning and budgeting while providing logistical support to sustain CHW programs is crucial. CHWs are recognized as part of the formal health system (policies are in place that define their roles, tasks, and relationship to the health system). CHWs are widely recognized and appreciated for providing service to the community. For example, during the COVID-19 pandemic, CHWs were on the frontline to provide linkage to social services and support and played a key role in contact tracing, yet most agencies furloughed CHWs when they were faced with budget cuts.

Use of data for quality improvement - Program data should flow to the health system and back to the community to show how CHWs are used for quality improvement. CHW programs use data to provide feedback on CHW performance and inform programmatic

improvement. The use of CHW documentation provides community-level data for quality improvement as well as insight into the impact of CHWs and CHW programs. The use of data/documentation systems and/or leverage data leads to improving the quality, speed, and equity of services.

Limitations

Limitations of this research include reliance on self-reporting in the MA and inclusion of a relatively small sample reflecting a limited geographical area. Focus group participants, who were employed CHWs, might have been impacted by social desirability, although their willingness to discuss demotivators and challenges suggests responses were credible. Additionally, comparison of qualitative data from a single region with MA results from across the state suggests consistency in these findings and potential generalizability throughout Ohio and similar states.

Conclusion

The results of this study make a credible contribution to better understanding key motivators for CHWs. These results emphasize the potential benefits of understanding the supporting motivating factors for CHWs as crosscut key identities that underpin their success. Additionally, this study contributes to current understanding of the antecedent of CHWs' well-beings from their own perspectives, highlighting homogeneity in diverse environments.

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Chapter 5: Discussion and Conclusion

Overall, these three studies focused on a critical public health workforce with recognized potential to promote health equity. Dearth of comprehensive evidence-based research demonstrating that CHWs can improve health outcomes may contribute to the lack of impetus for policies and system changes needed to support the role of CHWs in public health programs. This section will briefly review the main findings from each study, provide an integrated summary of the three studies, provide suggestions for future research in this field, discuss the implications of this work, and share some limitations of this dissertation.

Chapter 2 described an international scoping review of published research reporting factors impacting CHW retention and turnover. This review identified a paucity of research on CHW turnover, especially where CHWs work after leaving the field. This work suggests the need for future research to explore where CHWs go, to calculate attrition rates, and to further investigate the role of financial incentives. This study further recommends developing a method of consistently measuring incentivizing factors across contexts.

Chapter 3 described an exploratory qualitative focus group study, framed in Self-Determination Theory (Deci & Ryan, 1985), and aimed at improving understanding of the contexts, challenges, and motivators that impact CHW practices. CHWs described profound challenges related to client needs and, at times, limited resources. CHWs gained intrinsic motivation from their developed competence in navigating challenges and were often self-directed in their work, although they felt loss of control when client needs surpassed available resources. CHWs would additionally benefit from improvements in professional recognition,

increases in resources, and additional opportunities for empathetic exchanges to encourage feelings of relatedness.

Chapter 4 described mixed methods results of an assessment conducted with CHWs across the state of Ohio to rank motivational factors. This study added to the knowledge of the potential benefits of understanding and supporting motivating factors/enhancers for CHWs as it crosscut key identities which underpin their success. The study contributed to current understanding of antecedent of CHWs well-being from their own perspectives, highlighting homogeneity in diverse state and local environments.

Taken as a whole, the results from these three unique studies make contributions to the current interventions and challenges that still exist in evaluating the effectiveness of CHWs and recommendations for warranted additional research for this cadre.

The three studies presented consistent findings on the documented challenges experienced by CHWs. In order to address the high turnover rates for CHWs, Chapter 2 highlighted the need for focused research on major contributing factors including poor renumeration, lack of training, supervision, sustainable program funding, recognition and integration, high number of caseloads, and lack of resources. Chapter 3 assessed CHW perspectives on challenges related to client needs and ,at times, limited resources, and chapter 4 assessed CHWs' motivation impeders for CHWs in diverse settings.

Recommendations for Future Research

CHW Retention

CHW turnover causes critical breakdowns in the delivery of social and health services to high-risk populations. Literature on reasons for high turnover rates is limited, although some have been identified in studies on the sustainability of CHW programs. The U.S.

Bureau of Labor Statistics (2023) projected 14.1 percent CHW workforce growth from 2022–32, much faster than the 2.8% average for all occupations. This growth calls for a need to understand and address causes of attrition in the workforce. Themes for factors affecting retention consistently focused on the CHWs' challenges and unmet needs to perform their duties. Chapter 2 identified factors supporting CHW retention in various settings. Preferred incentives identified worldwide include transportation means and allowances, identification badges or uniforms, in-service training, salary, appropriate workload, recognition, and access to tools (Agarwal et al., 2021). Financial factors, material factors including lack of resources and transportation support and non-material factors, such as work location inconvenient to home and associated lack of community affiliation, lack of recognition, and lack of career progression, were demotivators and reasons for leaving one's position. Intrinsic factors, such as community affiliation, were motivators for entering the field and inspired positive impressions of the position, although these were not always ample to inspire long term retention (Arora et al., 2020).

In Chapter 3, themes developed from focus groups presented consistent need for better working conditions, including what is perceived by CHWs as a manageable client caseload. Other desired factors included enhanced CHW support and recognition, consistent resource availability, better pay, and career advancement. Motivated employees are more highly engaged in organizations (Tsvangirai & Chinyamurindi, 2019; Zareen et al., 2015). Motivation enhances productivity (Meena & Kumar, 2021) and improves employee retention (Nazim et al., 2021). Chapter 4 assessed motivation assessment to understand factors that support CHW productivity and intention to remain in the field. For example, CHWs are best

motivated by work that provides opportunities for personal growth and professional development, irrespective of the direct remuneration and technical skills obtained.

Career Advancement

Consistent with the existing literature, concern regarding lack of pathways to career advancement among CHWs was noted in the conducted studies. In Chapter 2, lack of career progression/advancement was cited in reviewed studies as a key factor for CHWs to leave the field in search of opportunities that provided career growth. While reflecting on CHW roles, findings in Chapter 3 corroborated the global concern for lack of career growth, with participants describing lack of opportunity, and how this inspired some to explore other avenues for career growth. While some reasons for leaving or associated with intent to leave were described in reviewed previous studies, little is known about other fields the CHWs go to after leaving their role. This information in particular might be key to supporting CHWs' career growth.

One finding to note from one U.S.-based article within the reviewed studies in Chapter 2 was the indication that some CHWs felt it was necessary to leave the role of CHW in order to achieve career progression (Smithwick et al., 2023). This left CHWs with a difficult choice between professional development and continuing to do work they were passionate about. This suggests that among some U.S.-based CHWs, there is desire for promotion and progression opportunities that retain some elements of community-based practice and engagement.

Future studies can focus on mapping career paths within CHW roles based on gained experiences and skills, which is supported by findings in Chapter 3 and previous studies (Tshering et. al., 2019) where CHWs maintained that that they wanted to remain in the

workforce and make an impact in their clients' lives rather than advance to other careers. The motivators and identities profiled in Chapter 4 provided clues to program organizers to focus supervision, training, and career growth based on CHW *strong motivators*, motivators that are core drivers at work right now, vs. *neutral motivators*, which are those that are not very important right now and are not what inspire people to get up every day and go to work. Career advancement and associated learning were among the top 6 motivators, which also included family, impact, empathy, purpose, and social responsibility.

Overall Recommendations

This three-study dissertation demonstrated enabling factors and challenges for CHW performance from their perspective. This is critical in understanding how CHWs navigate and focus efforts to manage workload and shows the need to strengthen CHW support to encourage recognition of their contributions and, in turn, bolster sustainability. Such programmatic emphasis can focus on enhancing key motivational factors revealed through this research, which have potential to improve the CHWs' experiences in their roles. Engagement of CHWs and improvement of CHW programs is critical to improving the care provided to families and communities, along with building supportive systems to recognize the work done by CHWs and provide long-term sustainability.

Based on the developed themes in Chapter 3 and results for key motivators in Chapter 4, this study proposed the magnification of seven facets of CHWs' refined themes of motivators: 1. Resources/equipment and supplies, 2. Renumeration - Livable wages, 3. Opportunity for advancement, 4. Integration in the healthcare system, 5. Supervision, 6. Training, and 7. Strategic use of data for quality improvement to support program efficiency and CHW retention in the workforce.

Resources/equipment and supplies: CHWs expressed their frustrations and burnout due to the lack of or scarce resources for clients, which include housing, food, transportation, employment, childcare, and mental health support, among others. While CHWs are knowledgeable about available resources and how to navigate the complex system barriers, program advocates must be on the forefront of addressing those systemic barriers, including racial disparities, safe housing, transportation, access to nutritious food, physical activity opportunities, and access to healthcare, to access resources. Lower perceived organizational support to provide care for patients/clients with social needs is associated with higher burnout for health care providers including CHWs (Telzak et.al, 2022.; Tuyisenge et. al., 2019). In general, CHWs experience burnout from the demands of caring for clients with complex social and health needs and may need training, awareness, and resources on how to navigate these complexities while maintaining self-care to prevent burnout. Devoting programmatic resources to support CHWs' work may reduce burnout and consequently reduce turnover rates and improve the success of CHWs programs.

Livable wages: The findings of this study were consistent with other studies which reported that despite challenges faced in their work, CHWs want to retain their identities rather than advancing to other helping professions (Anabui et al., 2021). However, when asked about their challenges, CHWs discussed external challenges they faced, such as scarce resources, high caseloads, and working long hours, but rarely mentioned renumeration. CHWs decried being in the same predicament "in the same system" as their clients in terms of needing social and health support. A participant from the study results reported in Chapter 3 described, "I make enough to survive, but I also want to get, you know, food stamps with my clients. And I want to go to the same food bank with my clients because I'm just making it." High risk of poverty and

insufficient compensation pose substantial risk to individual CHWs and the workforce as a whole, and therefore must be addressed to bolster sustainable CHW programs.

Opportunity for advancement: CHWs bring invaluable skills to bridge the gap from community to health care utilization through lived experiences. Pathways HUB CHWs are typically provided career pathways. First, advancement is offered to CHWs who perform well and who express an interest in advancement if the opportunity exists within the program or organization. Second, training opportunities are offered to CHWs to learn new skills to advance their roles, and third, advancement is intended to reward good performance or achievement and is provided through a fair evaluation based upon experiences and skills, additional training, certification, and job responsibilities, including peer support. Building upon this model, formal education should not be the singular requirement for career advancement within the CHW role, but rather substantial and relevant lived and work experiences could be factors for advancement in lieu of standard educational requirements. Dunn, et al. (2021) suggested developing a tailored curriculum for continuing education units and other professional development resources through state health departments or universities to be incorporated into the certification curriculum in order to increase foundational competency. The CEUs can be used for CHWs' growth and advancement, which, in turn, could aid in CHW retention.

*Integration in the health system***:** CHWs described some of the structural challenges resulting from lack of recognition as a part of the care team and associated lack of support for their clients. Implementation or expansion of policies that integrate and include CHWs in health system planning and budgeting and provide logistical support to sustain CHW programs improve CHW recognition as part of the formal health system. Of particular value are explicit policies which define CHW roles, tasks, and relationships to the health system.

CHW interventions have been proven to improve populations' clinical outcomes and reduce the cost of health care (Centers for Disease Control and Prevention, 2022; Kennedy, et al., 2021). The first of two studies conducted to evaluate the Community Action Pathways HUB program's effectiveness on maternal and infant health outcomes indicated that there is a strong, significant association between 1st and 2nd-trimester enrollee's dosage of CHW-led program services and supports and positive birth outcomes (Larwin & Larwin, 2024). The second study showed that the cost benefit of these services is a safe investment, at a 4.4 return on cost savings when compared to the cost of investing in the CHW-led program (Larwin et.al., 2023).

However, inherent challenges persist within the health care system to augment CHW integration and financing (Rogers, et al., 2018). In order to reap the full potential of perceived benefits, there is a need to not only expand the understanding of CHW roles and benefits by providers, funders, and health system leadership (Sabo, et al., 2021), but also to leverage new strategies for expansion of adequate Medicaid coverage mechanisms for CHW services (Rogers, et al., 2018; Sweta et al., 2023) to promise a sustainable workforce.

Supervision: Regular supportive supervision to promote skill development, problem solving, and performance review is warranted in three key areas. First, implementing existing scorecard review where the supervisor provides a summary of statistics regarding CHW performance, including number of home visits and number of Pathways, to each CHW to identify areas for improved service delivery is beneficial. Second, provision of technical support where a dedicated supervisor conducts monthly supervision visits that include reviewing reports and providing problem-solving support to the CHW is warranted. Third, program directors and supervisors provide enhanced support to CHWs to address community needs, including the provision of resources, referral support, higher levels of care, and others, and have implemented

services as applicable, increases outcomes. Importantly, CHWs also reported that they experienced hardships and had a need for resources including food and housing, similar to their clients. The results of this study support the provision of CHW compensation that is financially at a competitive rate relative to the respective market to prevent high turnover rates and ensure sustainable social services programs.

Training: Initial and continuous training on CHW roles and core competencies are essential to maintaining a sustainable workforce. In addition to the certification training provided through the Ohio Board of Nursing curriculum, program-specific training and continued education will provide CHWs with the required skill and competency to perform their role. Such trainings include, but are not limited to, Culturally and Linguistically Appropriate Services (CLAS), Motivational Interviewing, Boundary and Ethics, Child Abuse Training, Mental Health First Aid and Reponses, Chronic Disease Self-Management Education Trainings, and others that provide skills that support the CHW role for various at-risk populations.

Strategic use of data for quality improvement: There is untapped potential in the process where program data flows to the health system and back to the community and can be used for quality improvement. CHW programs use data to provide feedback on CHW performance and inform programmatic improvement. There is a need for improved use of CHWs' documentation of community-level data for quality improvement, as well as insight into the impact of CHWs and CHW programs. Data should be leveraged to improve the quality, speed, or equity of services.

Conclusion

Given the dearth of qualitative research on CHW motivators and perspectives into their own role about their experiences, this research contributed unique insights from this

workforce. The findings presented here retrospectively documented the lived experiences and specifically the challenges encountered by this specific group of CHWs. While CHWs described how they can creatively and competently often address structural barriers at the individual level, they clearly are not a panacea to attaining health equity, but rather key supporting actors for overarching systemic change (Colvin & Swartz, 2015; Logan, 2018). Instead, as asserted by Colvin and Swartz (2015), CHWs should be supported internally and should not shoulder the burden of ineffective programs and health care systems.

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Appendix A

Complete Search Strategies

Concept	CINAHL	PubMed	Business Source Complete	MEDLINE Complete
Complete Search Strategy	((MH "Community Health Workers")) AND ((MH "Personnel Turnover") OR (MH "Personnel Retention") OR attrition OR "turnover intention" OR "intent to leave" or "employee retention" or "labor turnover"	("Community Health Workers"[Mesh]) AND ("Personnel Turnover"[Mesh] or "personnel retention"[tiab:~0] or "turnover intention"[tiab:~0] or attrition or "intent to leave"[tiab:~0]) or "employee retention"[tiab:~0] or "labor turnover"[tiab:~0]	("community health workers") AND ((DE "LABOR turnover") OR (DE "EMPLOYEE retention") OR "turnover intention" OR attrition OR "intent to leave") or "personnel turnover" or "personnel retention"	((MH "Community Health Workers")) AND ((MH "Personnel Turnover") OR "turnover intention" OR "personnel retention" OR attrition OR "intent to leave" OR "employee retention" OR "labor turnover")

Appendix B

All Motivators with Number of Selections as Strong, Moderate, and Neutral, n = 150

Motivator	Strong[a]	Moderate[b]	Neutral[c]
Family	34*	7	1
Impact	19*	4	0
Empathy	18*	11*	0
Learning	16*	5	1
Purpose	8*	6	2
Social Responsibility	7	13*	1
Excelling	6	6	3
Fun	6	2	3
Problem Solving	6	6	1
Teamwork	6	7	4
Variety	5	3	22*
Challenge	3	10*	0
Ownership	3	3	3
Autonomy	2	9	5
Developing Others	2	16*	0
Friendship	2	12*	2
Pressure	2	4	7
Service	2	10*	0
Creativity	1	5	3
Excitement	1	2	9*
Prestige	1	1	25*
Money	0	2	56*
Recognition	0	6	2

*Most frequently selected items: Top 5 for Strong and Neutral; Top 6 for Moderate due to tie score