


# A Self-Management Training Intervention: Perceptions and Practices of Community Health Workers in South Africa

Wilson Majee, PhD, MPH<sup>1</sup>   
Adaobi Anakwe, MPH<sup>1</sup>  
Levona Johnson, MS<sup>2</sup>  
Anthea Rhoda, PhD<sup>2</sup>  
Jose Frantz, PhD<sup>2</sup>  
Laura Schopp, PhD, ABPP<sup>1</sup>

**Background.** While community health workers (CHWs) are increasingly being used as a strategy for increasing health care access, particularly in rural communities, interventions are needed to improve their skill sets in inspiring health behavior change, both for themselves and among their community clients. **Self-management (SM) education interventions** have shown to improve health behaviors and well-being. **Purpose.** This article reports on systematic, in-depth interviews conducted with rural CHWs in South Africa to understand (1) their motivation for participating in SM training, (2) skills gained from training and (3) perceived impact of training on CHW health behavior, both personally and as health professionals. **Method.** Nineteen rural CHWs who completed an SM training participated in face-to-face semistructured interviews. Transcripts were independently coded by two researchers using the thematic framework approach. **Findings.** CHWs felt empowered to change their health behavior by skills such as goal setting and action planning, and by growth in self-awareness and confidence. They expressed that their desire to help others motivated them to participate in SM training. **Conclusion.** SM training programs that address practice skill gaps hold promise in producing health behavior changes for rural CHWs and their clients.

**Keywords:** self-management; community health worker; health behavior; rural communities

## ► BACKGROUND

Many countries in developing regions are dealing with critical shortages of health professionals (Connell, Zurn, Stilwell, Awases, & Braichet, 2007; World Health Organization, 2006) while experiencing high disease rates (Peters & Kayne, 2003; Scheffler, Liu, Kinfu, & Dal Poz, 2008). Africa, for example, has only 2% of the global supply of doctors, yet endures 24% of the global burden of disease (Frontières, 2007; Scheffler et al., 2008). Rural, resource-limited communities are disproportionately affected by complex conditions such as general poverty, underdevelopment, fragile health systems, and poor resource management that impact population health outcomes (Caprara, Mati, Obadare, & Perold, 2013). Governments around the world, especially in low- and middle-income countries, are intensifying their efforts in training and deploying community health workers (CHWs) to mitigate this

<sup>1</sup>University of Missouri, Columbia, MO, USA

<sup>2</sup>University of the Western Cape, Cape Town, South Africa

## Health Promotion Practice

Month XXXX Vol. XX, No. (X) 1–10

DOI: 10.1177/1524839918820038

Article reuse guidelines: [sagepub.com/journals-permissions](https://sagepub.com/journals-permissions)

© 2019 Society for Public Health Education

**Authors' Note:** Address correspondence to Wilson Majee, Department of Health Sciences and Public Health, University of Missouri, 536 Clark Hall, Columbia, MO 65211, USA; e-mail: [majeew@missouri.edu](mailto:majeew@missouri.edu).

health human resource crisis. CHWs are lay people who live and work almost exclusively in the communities they serve. They perform multiple functions, including patient and community education, decreasing cultural, linguistic and literacy barriers, linking people with community resources, facilitating patient communication, and adherence to care (Brownstein et al., 2005).

To our knowledge no study has focused on the self-management health behavior change needs of CHWs. Most studies and reviews have examined the role of CHWs as interventionists in the prevention and management of a variety of chronic conditions, and the success of CHW programs (Brownstein et al., 2005; Norris et al., 2006; Saprii, Richards, Kokho, & Theobald, 2015), but the role of CHWs as interventionists and the success of their programs may depend on the health profiles of CHWs. Generalizations about the health profile of CHWs are difficult because CHWs can be men or women, young or old, literate or illiterate, poor or not poor. Nonetheless CHWs in resource-limited communities are likely to be poor themselves, and are also likely to be of poor health. Particularly in rural areas, CHW programs have had mostly limited achievements because of lack of ongoing training and supervision, transportation, and support (Baptistini & Figueiredo, 2014; Saprii et al., 2015). For example, when training is provided, it is usually short and limited in scope compared with the range and magnitude of health care challenges CHWs face both at individual and community levels. CHW pre- and-in service training studies in sub-Saharan Africa and South Asia have shown inconsistencies in the types of training, use of training material, depth of training, and cultural competencies of trainers (Kumar, Nefdt, Ribaira, & Diallo, 2014; Redick & Dini, 2014). Despite the increased reliance on CHWs, research has shown that CHWs are not effectively trained, remunerated, or retained (Redick & Dini, 2014). While this is a global problem, in this article we highlight rural South Africa as a case in point.

In 2010, South Africa's national Department of Health launched the reengineering primary health care initiative that uses CHWs to support a preventive and health-promoting strategy for primary health care (Austin-Evelyn et al., 2017; Nxumalo, Goudge, & Manderson, 2016). In this model, CHWs in South Africa provide integrated health and social care to households and form the "links" and "bridges" between health and social care providers and poor communities (Nxumalo et al., 2016). Given South Africa's limited resources and its quadruple burden of disease (Mayosi et al., 2012) the need for cost-effective strategies such as the deployment of CHWs

cannot be overemphasized. The current growth in the deployment of CHWs as an intervention to close the workforce gap and improve equitable access to care and health outcomes (Norris et al., 2006) must be sustained to meet the health needs of rural communities.

While increasing attention is being paid to training that improves CHW service delivery, little is being done to improve the health status of CHWs. Aligning CHWs' skills with appropriate tasks, providing adequate initial and continuous training, flexible work schedules, realistic expectations of work activities, and encouraging goal setting are all integral factors to effective CHWs well-being and service delivery (Meister, Warrick, De Zapien, & Wood, 1992).

Self-management (SM) is a promising approach to modifying health behaviors to improve health outcomes of CHWs. SM has been defined as collaborative effort between the individuals, families, and health care professionals to manage symptoms, treatments, lifestyle changes, and psychosocial, cultural, and spiritual consequences of health conditions (Richard & Shea, 2011). Based on the social learning theory, SM emphasizes the expectations a person has about being able to achieve a specific behavior. This sense of self-efficacy influences success in initiating a new behavior (Bandura, 1977). Self-efficacy can be improved through strategies such as skills mastery, modeling, alternate explanations for physiologic symptoms, and social persuasion (Lorig & Holman, 2003). Mastery of a new behavior in turn gives individuals more motivation and confidence to change other health behaviors (Goetzel & Ozminkowski, 2008). Behavioral activities such as specific goal setting, contracting, and more personalized and consistent behavioral feedback mechanisms have been shown to be more effective in improving health behaviors than cognitive strategies such as health education and awareness campaigns (Goetzel & Ozminkowski, 2008). SM has been validated in numerous studies among clients with diverse chronic health problems such as asthma, hypertension, diabetes, arthritis, and a host of other conditions (Steinsbeek, Rygg, Lisulo, Rise, & Fretheim, 2012).

The three core tasks of SM include the medical management of the condition, behavior management including changes in roles brought on by the illness, and emotional management (Lorig & Holman, 2003). SM training provides skills that support individuals to define a goal, develop an action plan to address that health goal, and build skill and confidence in managing personal health needs to meet that goal.

*Act Healthy* is a program developed to make self-management practices flexible and accessible in diverse work environments (Schopp, Bike, Clark, & Minor, 2015). Inspired by the more extensive chronic disease

SM program developed at Stanford University (Lorig & Holman, 2003), *Act Healthy* groups meet in the workplace or other environments for 50 minutes once a week as part of a 6-week series, co-led by trained coworker volunteers. Group meetings focus on defining a health goal, developing a weekly action plan, reporting on the previous week's action plan, problem solving to create an action plan the participant is confident in achieving, and sharing health resources.

This article reports on systematic, in-depth interviews conducted with rural CHWs in South Africa who participated in *Act Healthy* to understand (1) their motivation for participating in SM training, (2) skills gained from training and (3) perceived impact of training on CHW health behavior both personally and as health professionals.

## ► METHOD

### *Context and Setting*

Two rural communities were selected that are representative of the overall rural population of South Africa's Western Cape. The first community, Genadendal, has a population of 5,663, of which 94% were "Colored" and 3% "Black" as defined by the South African government—representing two of the most disproportionately affected populations in South Africa (Western Cape Government Provincial Treasury, 2015). Seventy-four percent of the population does not have Internet access, 28% have no indoor plumbing, and 68% live on an average monthly income of R3,200 (U.S. \$250). This community is served mostly by CHWs from a local small nonprofit organization. The second community, Greyton, has a smaller but more diverse population of 2,779 of whom 69% are described as Colored, 24% White, and 5% Black (Western Cape Government Provincial Treasury, 2015). Community resources in Greyton include a public library, two public primary schools, churches, an independent senior living complex, grocery stores, hotels/lodges, restaurants, and pharmaceutical shops. Greyton is served mostly by CHWs from the Red Cross.

These two communities were purposively selected based on the researchers' prior knowledge working in the communities and a request by the Red Cross administrator to provide training targeted at giving CHWs skills that help reduce their vulnerability as community care providers.

### *Participants and Recruitment*

The target population was a purposive sample of 20 CHWs who participated in the *Act Healthy* SM training in two communities in the Western Cape

**TABLE 1**  
**Participant Sociodemographic Information**

| <i>Characteristic (n = 20<sup>a</sup>)</i>       | <i>n (%)</i> |
|--|--------------|
| Gender   |              |
| Male <sup>a</sup>                                | 1 (5)        |
| Female   | 19 (95)      |
| Ethnicity  |              |
| Colored (per self-designation)                   | 20 (100)     |
| Hours worked per week                            |              |
| <20  | 3 (15)       |
| 20-29  | 10 (50)      |
| 30-39  | 2 (10)       |
| 40+  | 5 (25)       |
| Education status                                 |              |
| Some high school or less                         | 14 (70)      |
| Finished high school or more                     | 6 (30)       |
| Age, years, <i>M (SD)</i>                        | 40.0 (10)    |
| Employment duration as CHW, years, <i>M (SD)</i> | 7.27 (2.62)  |

NOTE: CHW = community health worker.

<sup>a</sup>*n* = 20 includes the male CHW who did not interview. However, he participated in the training and completed the demographic survey.

Province of South Africa. Of the 20 invited to take part in the study, 19 (95%) elected to participate, and inclusion into the study was based on availability and willingness to participate in training and posttraining interviews. As semistructured interviews were the chosen data collection method, the researchers deemed this sample size sufficient to ensure data saturation. Additionally, the directors of the two local NGO CHW employers also consented to the interview, making the total number of interview participants 21 (19 CHWs and 2 administrators). None of the participants received compensation for participation. All participants were Afrikaans with some high school education, Grade 12 (6), Grade 10 (3), and Grade 9 (10). All participants, except for one, were women (Tables 1 and 2).

### *Data Collection*

Semistructured interviews with CHWs (approximately 25-30 minutes in duration) inquired about their motivation for participating in SM training, what they learned from the training, and the impacts of this newly acquired knowledge and skills on their own health behavior and on the care they offer to their clients. CHWs who agreed to participate scheduled a time to meet with one of the researchers at their workplace or a neutral

**TABLE 2**  
**Health Characteristics of Participants**

| <i>Characteristic (n = 20*)</i>   | <i>n (%)</i> |
|---|--------------|
| In the past week, how often has your health interfered with your work life?                       |              |
| Always  | 5 (25)       |
| Usually   | 4 (20)       |
| Sometimes   | 10 (50)      |
| Rarely/never  | 1 (5)        |
| In the past week, how often has your health interfered with your personal life?                   |              |
| Always  | 9 (45)       |
| Usually   | 5 (25)       |
| Sometimes   | 6 (30)       |
| Rarely/never  | 0 (0)        |
| Did you have any difficulties with your daily activities because of your health in the past week? |              |
| Always  | 9 (45)       |
| Usually   | 0 (0)        |
| Sometimes   | 10 (50)      |
| Rarely/never  | 1 (5)        |
| In general, how would you say your health has been in the past week?                              |              |
| Excellent   | 3 (15)       |
| Very good   | 1 (5)        |
| Good  | 14 (70)      |
| Fair/Poor   | 2 (10)       |

\*n = 20 includes the male community health worker who did not interview. However he participated in the training and completed the demographic survey.

location recommended by the participant. All interviews were audio recorded and transcribed verbatim.

### **Analysis**

Interview data were analyzed using a thematic analysis (Braun & Clarke, 2006). Two of the authors met to discuss and familiarize themselves with the content of the first five interview transcripts and to develop a coding scheme. The coding scheme started with identifying skills developed during SM training (Corbin & Strauss, 1988; Lorig & Holman, 2003). Inductive analysis was used to identify new themes and expand on subthemes related to SM skills. After the two authors reviewed five transcripts together, both reviewed the rest of the interviews to code the data based on the developed coding scheme. Finally,

two of the coauthors reviewed the final coded transcripts together to verify complete and reliable coding and resolve areas of disagreement. Transcripts and codes were entered into NVivo 11 for further analysis.

## **► RESULTS**

Findings are presented under three broad themes: (1) motivation for participating in training, (2) skills gained from training, and (3) perceived impact of training on CHW health behavior. Illustrative quotes were used on each theme to substantiate key experiences shared by multiple participants. Table 3 provides more quotes.

### ***Motivation for Participating in Training***

*Desire to Learn and Help Others.* People may be motivated by internal (curriculum context, activities during training etc.) and external (incentives, being away from work, etc.) factors. Most CHWs were motivated to participate in SM training mainly because they wanted knowledge and skills to better care for themselves and become better caregivers.

Because I'm also on a chronic medication and so I tell myself, training is nice for me. I can go out and show the people outside how to manage [their] chronic medicine. I can teach them, you must do that to control your illness. (CHW328\_006)

Administrators of the organizations expressed the same feelings that despite their own familial struggles, CHWs continue to participate in activities that enhance their skills to help others. One of the directors articulated,

I mean, they(CHWs) have to walk far distances in the sun and in the rain, and that's why I'm so proud of them that they do it [training program] without moaning and groaning about it. (DIR328\_003)

### ***Skills Gained From Training***

Most CHWs who took the training shared their perceptions on how the training had empowered them to take action toward improving their own health, the health of clients, and community members. Reports from CHWs focused on goal setting and action planning, and self-awareness and confidence.

*Goal Setting and Action Planning.* During training CHWs made short-term action plans that involved a

**TABLE 3**  
**Community Health Worker Perceptions: Thematic Quotes**

| <i>Domain</i>                | <i>Theme</i>                     | <i>Selected Additional Quotes</i>   | <i>Questions Asked</i>   |
|------------------------------|----------------------------------|---|--|
| Motivation for participating | Desire to learn and help others  | <p>I try to check the clinic cards for did they go for immunization, did they get their [U] and deworming, or did they follow up they appointments and stuff like that by the, by the children. (CHW328_005)</p> <p>So in order to help somebody else we have to learn to look after ourselves. We have to learn to manage ourselves in order to go to the community. Because I want to manage myself (better) before going out into the community and work with others. (CHW329_003)</p> <p>It [the training] will help me in my work in the community. This lady that I have now been working with is 79 years old, and she's a heavy smoker She smokes like a packet or two a day and I want to help her. (CHW328_005)</p> <p>I can mention a particular carer that has really had some dreadful problems in her life. One of the worst is that she's got an autistic son and we cannot get him into any kind of institutional school. So he's roaming the streets, creating problems, smoking marijuana, being used by the local drug dealers to deliver product, and it's deeply distressing for her. I'm amazed that the woman gets up in the morning and comes to work, but she does, and she's one of our best carers. (DIR327_005)</p> <p>Now if we go to the patients with a [self-management] action plan, that's amazing to give them that opportunity where they can decide and where we will just help them with it. (CHW327_003)</p> | Thinking of the self-management training you had last week: What made you want to sign up for the program?   |
| Skills gained from training  | Goal setting and action planning | <p>(My goal is) To finish my medication on time, drink it every day. But the second day I forgot to do medication. I told them (<i>program facilitators</i>), I forgot. They encourage me again. They said why don't you set an alarm or put your medication where you can see it every morning so that you don't forget, and it worked. (CHW328_002)</p> <p>I choose relaxing time for myself because I very much need it. There's lots of things that I've been through and need to think about, but it won't happen because work is keeping me constantly busy and at home I am busy too. So I don't have time for myself. (CHW329_001)</p> <p>My challenge was eating too many take-aways. So I set a goal that three times a week I'm not gonna eat take-aways. So I set my goal (not to eat take-aways) for Monday, Wednesday, and Fridays. (CHW328_005)</p>  | Thinking of the self-management training you had last week: What are some of the important things you got from the trainings?                            |
|                              | Self-awareness and confidence    | <p>At first I didn't like it [SM training] because a lot of personal stuff comes out. But just knowing everyone (<i>helped because</i>) I think I've got a problem but there's someone else always having a bigger problem than mine. (CHW327_004)</p> <p>Now, I'm going to encourage my clients or people in the community if they are sick go to the clinic. If they give you medication, drink the medication because it will help you. (CHW328_002)</p>   | Looking ahead, do you think the skills you gained will help with your job?<br>Explain how you see yourself using the skills you gained from the training |

(continued)

**TABLE 3 (CONTINUED)**

| Domain                           | Theme                   | Selected Additional Quotes   | Questions Asked  |
|----------------------------------|-------------------------|--|--|
| Perceived health behavior impact | Solution implementation | <p>Now I have, little by little I'm gaining my confidence. I can speak to young people that they mustn't be mistreated. I can speak to them about teenage pregnancy, openly, with them. I can let them come to my house without my mother worrying what is going on here, whatever. I can be just a role model for someone that really needs my help. (CHW327_004)</p> <p>I learned to be more open with people, to talk with people, don't put down stuff inside you . . . but sometimes it is difficult for me to talk with anyone. (CHW328_006)</p> <p>My action plan was to be more patient with my family, especially my wife. Sometimes I will go home and just being irritated and she won't know why. Actually by working on that [training] I've discovered that my wife herself wants to talk about things but I don't allow her to because of my level of irritation. Like, for instance, Friday night I actually took her out for dinner, which we didn't do (before the training). (CHW329_003)</p> <p>My goal is to spend more time with my little boys. My goal is to do things with my boys because their father left us with another wife and so, and that time I didn't think of them. . . . I used to be very tired when I get home, make lunch and put it there for the boys when they came out of school, then I go in to lay/sleep a little bit. But after that course I said to myself "No, I can't go and lay every time when I get out of the work. I must do something to get more energy, to be energetic because my two small boys are very hyper and I must be like them now." I begin with my goal because the night when I came home I asked my little ones "What do you want to play." They said, "Mommy, let us play marbles," and that's when I begin to play with them in that week. (CHW328_007)</p> <p>I think it's just a matter of good communication. We just have to communicate like with each other about what's going on. If I know I'm successful then I should just like encourage my coworker to also do that. So I think communication I think is a very good skill that should be there. (CHW328_001)</p> <p>Regularly talk about it (<i>set goals</i>), ask questions, ask each other . . . if I have a goal then it's personally my responsibility to always ask about it . . . So communicating about our goals and our action plans. (CHW329_003)</p> <p>We must motivate each other. If you see your friend is not doing what you think they must do then you motivate them to do it. Like we, we motivate each other doing stuff. If we see somebody eating not right, then we'll tell them what your action plan was and you must do that. (CHW327_001)</p> <p>We are connected on What'sApp so we can accommodate each other by telling whatever's ailing us to the next person, and that person can perhaps help us, setting us on track again. (CHW328_004) The social media group includes the trainers and interviewer.</p> | <p>Do you feel empowered by this program? Explain</p> <p>What other support do you need to use the skills you gained from the training? What would motivate community members to come to this training? What would help participants implement their action plans and be successful?</p> |

period of 1 or 2 weeks and had behavior change specific goals. While several participants initially struggled with developing realistic action plans, during the course of the training they demonstrated a clear understanding of the importance of attainable goals. Participants developed action plans they were confident they could accomplish (confidence rating of at least 8 out of 10).

My goal was to smoke a lot less. In the past I smoked, for instance, 12 to 13 cigarettes per day. So I set my goal for 10 per day for the first month. And when we checked in with the ACT Healthy facilitator last week I made it. (CHW330\_003)

*Self-Awareness and Confidence.* CHWs reported that the training helped them feel comfortable sharing personal experiences with other CHWs, which in turn helped them to discover more about themselves and increased their self-confidence. For some CHWs the supportive climate and social awareness environment created during training gave them the confidence to encourage clients or other community members to make healthy choices.

I'm much more relaxed. I can handle situations better, in the home and in my workplace . . . because I actually understand how to handle my emotions because I think that was one of the huge things I've worked on (since training). (CHW329\_004)

### **Perceived Health Behavior Impact**

There was consensus that *Act Healthy* training had not only given participants new skills in goal setting and action planning but had also improved their self-efficacy through implementation of action plans and establishment of peer support for new behavior maintenance.

*Solution Implementation.* Most participants explained how *Act Healthy* had helped them implement solutions to their individual and family challenges.

[Since the training], instead of sugar over the porridge I'm taking some fruit over the porridge, like cooking apples and put that in . . . I was drinking five spoons of sugar in a cup of coffee, and I went down from five to three. (CHW328\_004)

*Peer Support for New Behavior Sustainance.* Data analysis revealed awareness among CHWs of the fact that

they needed support to sustain any new behavior. Many acknowledged that they had set many behavior change goals in the past and not achieved them: "I set a goal but I never reach it. Why? You keep on being busy . . . you don't have time for yourself to do it." (CHW329\_001). CHWs suggested that peer support and social persuasion were critical for sustaining behavior changes.

Maybe come together, once a month or maybe once quarterly . . . to motivate each other again, to talk about what we have achieved till then. Because we set for ourselves goals it's nicer to talk with others about it, what you have achieved . . . that will motivate you more. (CHW328\_007)

The idea of moral support was also echoed by administrators.

What she (the trainer) was able to do, was get them to talk in a group about what mattered to them and, and they really responded to her and to the space that she was creating. It's a wonderful thing to have space where you are important and, and you're given the chance to talk about your feelings. Because it's a very small community everybody knows everybody else and everybody else's problems. (DIR327\_005)

The Director noted a common challenge of small rural communities, especially when dealing with group settings where personal information is shared. In small rural communities individuals tend to know each other more closely, and some people are less motivated to participate in events in which they discuss personal matters.

## **► DISCUSSION**

This study explored motivation to participate in SM training among CHWs, skills gained and how those skills affect health behavior. While this study was conducted in a particular context of rural South Africa, it is similar to other studies in that it validates a range of barriers that other CHWs face in performing their roles (Baptistini & Figueiredo, 2014; Saprii et al., 2015). For example, poor spousal relations and unsupportive comments or insults from community members impact not only the individual CHWs' ability to focus on their own health and that of others but also the organizational capacity to improve health outcomes in rural communities.

In low- and middle-income countries, rural CHWs tend to be low-skilled, and of lower SES (Redick & Dini, 2014), which in turn can strain familial, workplace and community relations, and SM training programs like *Act Healthy* that can enhance self-efficacy and collaborative processes among participants may help promote positive health behaviors. The *Act Healthy* training provided opportunity for CHWs to develop and implement behavior change action plans. Skills mastery occurred by encouraging participants to select incremental, realistic action steps. Participants specified what, when, where and how much or how long they would participate in their chosen behavior (Schopp et al., 2015).

While studies on CHWs have demonstrated that CHWs have an unusually deep understanding of the communities they serve (Brownstein et al., 2005; McCord, Liu, & Singh, 2013; Norris et al., 2006), we further noted that in small rural communities this in-depth knowledge about the community may serve as a double edged sword for CHWs. On one hand, it may enable CHWs to be effective in facilitating access to services and improve the quality and cultural competence of service delivery (Brownstein et al., 2005). On the other hand, the close relationships may imply that CHWs live an open book life where what happens at family level is known at community level. This exposure may affect their effectiveness in areas such as outreach, community education, informal counseling, social support, and advocacy. When in an abusive relationship or when dealing with a financial hardship, many CHWs do not voluntarily disclose to coworkers or other community members. The decision to disclose and seek help is often complicated by strongly held religious beliefs (Feyen, 1989), familial and cultural barriers (Browne, 1997) and lack of appropriate social and health services (Cantin & Rinfret-Raynor, 1993; Davis, Hagen, & Early, 1994; Tan, Basta, Sullivan, & Davidson, 1995). Furthermore, in small communities where “personal business is everyone’s business,” admission to familial abuse may result in disrespect from clients and community members. This puts CHWs in situations in which they have to present a false “happy and content” image of themselves, while in reality they may be depressed or entertaining suicidal thoughts. Assisting women in resource-limited communities to gain confidence in decision-making abilities can only happen if their wishes and decisions are respected (Garcia-Moreno, 2002). SM health interventions must focus on empowering CHWs to take control of their own health and social behaviors.

Data also suggest that CHWs are motivated to participate in training by a desire to become better resources for their communities. In many settings

workers are motivated to train by the desire for vertical promotion. Yet for this set of CHWs, acquisition of skills to better serve others was their primary goal. This culturally based mind-set is particularly common in South Africa, where the interdependence between individuals and communities is acknowledged and practiced. This “Ubuntu” or interdependence perspective was also exhibited when study participants emphasized the need for peer support to ensure that all of the CHWs would be successful with their action plans. This sense of openness and togetherness is fertile ground for the success of SM training in particular and CHW programs in general.

## ► CONCLUSION

Behavioral activities such as specific goal setting and implementation have been shown to be preventive measures in promoting health. In the context of rural South Africa, *Act Healthy* training addressed CHWs health behavior from a prevention perspective. It provided skills that supported individuals to define a goal, develop an action plan to address health goals, and build skill and confidence in managing personal health needs to meet that goal. Given the increased deployment of CHWs in rural communities, it is important, now more than ever, to develop training programs for CHWs, including those that develop standardized SM competencies, and tools to evaluate those competencies. These competencies would provide consistent standards for all CHWs across settings and ensure that the appropriate content is delivered and taught, allowing for the development of a sustainable and effective workforce (Aponte, 2015). Better workforce performance is positively associated with higher job satisfaction and training, particularly SM training, may have potential to increase job satisfaction as CHWs gain skills to understand how their own physical and mental health is related to their service delivery.

Rural CHWs provide community case management for a variety of health conditions and behaviors (diabetes, injuries, smoking, diarrhea, malaria, and malnutrition). Continued education on specific health conditions as well as on self-management concepts may help them progress toward better health for themselves and their clients.

One limitation of the study is that the study conducted only posttraining interviews. Thus the study lacked the pretesting of participants to develop a baseline of motivation to participate in SM training. Another limitation is that participants were mostly female, rural, and vulnerable CHWs, which limits generalizability to other rural and nonrural nonvulnerable CHWs.



Additionally, some of the participants were not fluent with English and that could have caused a communication barrier, which limited what CHWs wanted to convey in interviews. Future studies aimed at implementing culturally congruent interventions that address skill gaps experienced by CHWs should include pretraining interviews with key stakeholders such as CHWs and their clients, employers, clinic administrators, and faith leaders. This broader approach will enrich understanding of the interconnected factors that affect CHW health, and inspire new approaches for CHWs to motivate their clients toward health behavior change.

## ORCID iD

Wilson Majee  <https://orcid.org/0000-0003-1726-0979>

## REFERENCES

- Aponte, J. (2015). Diabetes training for community health workers. *Journal of Community Medicine & Health Education*, 5(6), 38. doi:10.4172/2161-0711.1000378
- Austin-Evelyn, K., Rabkin, M., Macheke, T., Mutiti, T., Mwansa-Kambafwile, J., Dlamini, T., & El-Sadr, W. M. (2017). Community health worker perspectives on a new primary health care initiative in the Eastern Cape of South Africa. *PLoS One*, 12, e173863. doi:10.1371/journal.pone.0173863
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological review*, 84, 191-215.
- Baptistini, R. A., & Figueiredo, T. A. M. (2014). Community health agents: The challenges of working in the rural area. *Ambiente & Sociedade*, 17, 53-70.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77-101.
- Browne, A. (1997). Violence in marriage: Until death do us part. In A. P. Cardarelli (Ed.), *Violence between intimate partners: Patterns, causes, and effects* (pp. 48-69). Boston, MA: Allyn & Bacon.
- Brownstein, J. N., Bone, L. R., Dennison, C. R., Hill, M. N., Kim, M. T., & Levine, D. M. (2005). Community health workers as interventionists in the prevention and control of heart disease and stroke. *American Journal of Preventive Medicine*, 29, 128-133.
- Cantin, S., & Rinfret-Raynor, M. (1993). Battered women using social services: Factors associated with dropouts. *Canadian Social Work Review/Revue Canadienne de Service Social*, 10, 202-219.
- Caprara, D., Mati, J. M., Obadare, E., & Perold, H. (2013). *Volunteering and civic service in three African regions*. Retrieved from <https://www.brookings.edu/wp-content/uploads/2016/06/06-volunteering-africa-caprara.pdf>
- Connell, J., Zurn, P., Stilwell, B., Awases, M., & Braichet, J.-M. (2007). Sub-Saharan Africa: Beyond the health worker migration crisis? *Social Science & Medicine*, 64, 1876-1891.
- Corbin, J. M., & Strauss, A. (1988). *Unending work and care: Managing chronic illness at home*. San Francisco, CA: Jossey-Bass.
- Davis, L. V., Hagen, J. L., & Early, T. J. (1994). Social services for battered women: Are they adequate, accessible, and appropriate? *Social Work*, 39, 695-704.
- Feyen, C. (1989). Battered rural women: An exploratory study of domestic violence in a Wisconsin county. *Wisconsin Sociologist*, 26(1), 17-32.
- Frontières, M. S. (2007). *Help wanted: Confronting the health care worker crisis to expand access to HIV/AIDS treatment: MSF experience in Southern Africa*. Johannesburg, South Africa: MSF.
- Garcia-Moreno, C. (2002). Dilemmas and opportunities for an appropriate health-service response to violence against women. *Lancet*, 359, 1509-1514.
- Goetzl, R. Z., & Ozminkowski, R. J. (2008). The health and cost benefits of work site health-promotion programs. *Annual Review of Public Health*, 29, 303-323.
- Kumar, M., Nefdt, R., Ribaira, E., & Diallo, K. (2014). *Access to healthcare through community health workers in East and Southern Africa*. New York, NY: UNICEF.
- Lorig, K. R., & Holman, H. R. (2003). Self-management education: History, definition, outcomes, and mechanisms. *Annals of Behavioral Medicine*, 26, 1-7.
- Mayosi, B. M., Lawn, J. E., Van Niekerk, A., Bradshaw, D., Karim, S. S. A., & Coovadia, H. M. (2012). Health in South Africa: Changes and challenges since 2009. *Lancet*, 380, 2029-2043.
- McCord, G. C., Liu, A., & Singh, P. (2013). Deployment of community health workers across rural sub-Saharan Africa: Financial considerations and operational assumptions. *Bulletin of the World Health Organization*, 91, 244b-253b.
- Meister, J. S., Warrick, L. H., De Zapien, J. G., & Wood, A. H. (1992). Using lay health workers: Case study of a community-based prenatal intervention. *Journal of Community Health*, 17, 37-51.
- Norris, S. L., Chowdhury, F. M., Van Le, K., Horsley, T., Brownstein, J. N., Zhang, X., . . . Satterfield, D. W. (2006). Effectiveness of community health workers in the care of persons with diabetes. *Diabetic Medicine*, 23, 544-556.
- Nxumalo, N., Goudge, J., & Manderson, L. (2016). Community health workers, recipients' experiences and constraints to care in South Africa: A pathway to trust. *AIDS Care: Psychological and Socio-medical Aspects of AIDS/HIV*, 28(Suppl. 4), 61-71. doi:10.1080/09540121.2016.1195484
- Peters, D., & Kayne, R. (2003). *Bangladesh health labour market study: Final report*. Baltimore, MD: Johns Hopkins Bloomberg School of Public Health.
- Redick, C., & Dini, H. (2014). *The current state of CHW training programs in Sub-Saharan Africa and South Asia: What we know what we dont know and what we need to do*. Retrieved from [http://1millionhealthworkers.org/files/2013/01/1mCHW\\_mPowering\\_LitReview\\_Formatted.compressed.pdf](http://1millionhealthworkers.org/files/2013/01/1mCHW_mPowering_LitReview_Formatted.compressed.pdf)
- Richard, A. A., & Shea, K. (2011). Delineation of self-care and associated concepts. *Journal of Nursing Scholarship*, 43, 255-264.
- Saprii, L., Richards, E., Kokho, P., & Theobald, S. (2015). Community health workers in rural India: analysing the opportunities and challenges accredited social health activists (ASHAs) face in realising their multiple roles. *Human Resources for Health*, 13, 95.
- Scheffler, R. M., Liu, J. X., Kinfu, Y., & Dal Poz, M. R. (2008). Forecasting the global shortage of physicians: An economic-and

needs-based approach. *Bulletin of the World Health Organization*, 86, 516B-523B.

Schopp, L. H., Bike, D. H., Clark, M. J., & Minor, M. A. (2015). Act healthy: Promoting health behaviors and self-efficacy in the workplace. *Health Education Research*, 30, 542-553.

Steinsbekk, A., Rygg, L., Lisulo, M., Rise, M. B., & Fretheim, A. (2012). Group based diabetes self-management education compared to routine treatment for people with type 2 diabetes mellitus. A systematic review with meta-analysis. *BMC Health Services Research*, 12, 213.

Tan, C., Basta, J., Sullivan, C. M., & Davidson, W. S. (1995). The role of social support in the lives of women exiting domestic

violence shelters: An experimental study. *Journal of Interpersonal Violence*, 10, 437-451.

Western Cape Government Provincial Treasury. (2015). *Socio-economic profile Theewaterskloof municipality 2015* (Working paper). Retrieved from [https://www.westerncape.gov.za/assets/departments/treasury/Documents/Socio-economic-profiles/2016/municipality/Overberg-District/wc031\\_theewaterskloof\\_2015\\_sep-lg\\_profile.pdf](https://www.westerncape.gov.za/assets/departments/treasury/Documents/Socio-economic-profiles/2016/municipality/Overberg-District/wc031_theewaterskloof_2015_sep-lg_profile.pdf)

World Health Organization. (2006). *The world health report 2006: Working together for health*. Retrieved from [http://apps.who.int/iris/bitstream/handle/10665/43432/9241563176\\_eng.pdf;jsessionid=0E8D41E1CC6752BB49CEA6A420D6E60D?sequence=1](http://apps.who.int/iris/bitstream/handle/10665/43432/9241563176_eng.pdf;jsessionid=0E8D41E1CC6752BB49CEA6A420D6E60D?sequence=1)