

Running Head: A SECONDARY DATA ANALYSIS OF THE PROFESSIONAL  
DEVELOPMENT NEEDS OF COMMUNITY HEALTH WORKERS IN OHIO

A Secondary Data Analysis of the Professional Development  
Needs of Community Health Workers in Ohio

Madeline Drenkhan

Ohio State University

### **Abstract**

In the state of Ohio, Community Health Workers (CHWs) are trained and certified under the Ohio Board of Nursing. This study aims to identify the professional needs and challenges faced by CHWs. Using a mixed methods sequential explanatory design, an online survey was distributed, and four key informant interviews were conducted. The data gathered from the survey and interviews were analyzed for common themes. Common areas of concern and need for development for CHWs included continued education and cooperation across sectors of the healthcare field. This information provides important insights into the need for better continuing education options for CHWs, as well as a more defined and integrated role for them within the healthcare field.

### **Introduction**

Community Health Workers are an integral part of providing health services and connecting communities to healthcare around the world. The American Public Health Association (APHA) defines CHWs as public health workers who are trusted members of the community that they serve, and have an understanding of that community as well (American Public Health Association [APHA], 2018). The nature of this relationship allows for them to be a liaison between the community and health services in order to improve access and increase quality of health (APHA, 2018). In addition, they increase health knowledge and self-sufficiency through linking community members with resources, including education, social support, and advocacy (APHA, 2018). Education

for Community Health Workers is a formal process that is shorter than most other health professionals, and their position's main aim is to provide culturally fitting health promotion and services to their community (Olaniran et al., 2017). Community health workers are seen as a way to effectively deliver healthcare to underserved populations in a cost conscious way (Arvey & Fernandez, 2012). However, their roles and training can be varied, and there exists limited consensus on these topics for CHWs, which can impede on their effectiveness in general (Arvey & Fernandez, 2012).

In terms of overall certification and training of CHWs, there is little consensus and wide variability between programs, including differences in length of program and learned content (O'Brien et al., 2009). Selection of CHWs also has a lack of commonality, with different states and organizations selecting CHWs in different ways. There is limited evidence on what experiences or education CHWs should possess (O'Brien et al., 2009). In the United States, some states have their own CHW Advisory Committees, while others have the certification of CHWs under the control of another entity, such as Nursing Boards (National Academy for State Health Policy [NASHP], 2017). Many states do not have State CHW Legislation, and many also do not require CHWs to be certified (NASPH, 2017). There is also wide variability within trainings and courses across U.S. states, with some requiring courses at community colleges, and some states having developed their own trainings within state departments (NASPH, 2017). The length of the trainings and the CHWs roles are different by state, depending on their cultural makeup and the specific communities that are underserved (NASPH, 2017).

In Ohio, CHW training is under the control of the Ohio Board of Nursing. The process involves filling out an application that must be approved by the Board of

Nursing, an application fee, approval of a program, and a training course (Ohio Board of Nursing, 2018). They require potential CHWs to take a certified training course, and the 14 approved courses can be found on their website (Ohio Board of Nursing, 2018). There is also a process of renewing certification as a Community Health Worker, which happens every 2 years and involves the Board of Nursing ensuring that the program that the CHW is involved with is still meeting the criteria needed to qualify the individual as a CHW (Ohio Board of Nursing, 2018).

With the variability of trainings and requirements for CHWs, there is an apparent need for more clarity and consistency. In Ohio, the requirement for continued education and recertification presents an optimal population to study to reveal what obstacles CHWs face, and what they need in order to more effectively help their communities. This study seeks to make transparent the professional development needs of Community Health Workers in Ohio and bring forward more information on the functioning of their roles.

Due to the nature in which the study was conducted, analyses of the results called for the use of a mixed methods approach in order to best evaluate and synthesize the information from the quantitative and qualitative portions of the study. A sequential explanatory design was used for the secondary data analysis. The application of a sequential explanatory design is to collect quantitative data and then collect qualitative data that will better inform that quantitative information (Ivankova, Creswell, & Stick, 2006). This method was utilized in the study for secondary data analysis.

### **Methods**

The study began with the collection of quantitative data through SurveyMonkey in the form of a 31-item survey that was distributed to Community Health Workers. The survey was distributed through email within the Ohio Community Health Worker Association (OCHWA), certified CHWs, community health worker training programs, health related listserv announcements, and word of mouth. To qualify as eligible for the study, the participant had to identify as a community health worker in Ohio and be over the age of 18. Every registered CHW would have received the survey through the distribution list, and as of January 2015, there were 141 certified community health workers in Ohio. Since the survey was distributed in multiple listservs, there were most likely more than 141 people who received the survey. The survey consisted of both closed and open-ended questions with demographics, questions relating to career, patient needs, and professional development. After closing the survey, the data were analyzed for trends with the tools offered by SurveyMonkey. The open-ended questions were analyzed for common themes and trends.

For the collection of qualitative data, four key informant interviews were conducted to expand upon the quantitative survey data, and explore more of the issues and obstacles that Community Health Workers in Ohio face. The interview consisted of a 16-item questionnaire relating to demographics, career, and community health work. These key informants were recruited through OCHWA through an email invitation and at general meetings. The key informants were required to be certified as a Community Health Worker in Ohio. Interviews were conducted via telephone for 1-1.5 hours. They were recorded in a .wav file with no key identifiers. Then they were transcribed, also with

no key identifiers. The transcriptions were then evaluated in order to analyze the data and pull for recurring themes. These themes were constructed by going through the transcriptions and then pulling topics that were commonly brought up during the interview. In addition, important quotes relating to the themes were collected and documented. Consent forms were used for both the survey and interview participants.

In deciding how to properly and most effectively present the data that was collected, research was done on mixed method study analyses. The study had a combination of multiple forms of data collection, so a mixed methods approach was chosen in order to best present the results. A review of current methods and literature in mixed method design and analysis was conducted. This led to the selection of the sequential explanatory design as the most fitting for the study. In this design, the quantitative data are collected first, and then qualitative data is collected to expand upon the themes or patterns revealed in the quantitative data. In the case of this study, the survey was first used to collect quantitative data and then the interviews, or qualitative data collection, was carried out second.

Within the analysis, results from the survey, including both closed and open-ended responses, were looked at in terms of common answers and themes in the open-ended questions. This involved looking at the frequency data for the questions, and going through the open-ended responses for frequency statistics as well. Once the important information from the quantitative data was pulled, the themes and important quotes from the qualitative interviews were used to supplement recurring themes and expand on answers to survey questions. The Community Health Worker's interview answers expanded upon what was presented in the survey data.

The use of a word cloud was chosen to better illustrate the results from the interviews in a way that would make synthesizing the survey and interview data more easy to understand. Word clouds have been demonstrated as a way to effectively portray text analyses and provide an easy visualization of results from a more complex set of data (Heimerl, Lohmann, Lange, & Ertl, 2014).

## **Results**

### **Mixed Methods**

After conducting a review of the literature on mixed methods, and deciding that the most fitting way to conduct the analyses would be with a sequential explanatory design, we worked to find examples of how this design model was used in the literature. Multiple articles that utilized a sequential explanatory design were found, and an article by Felix Cote-LeClerc was identified as using a readable and applicable method of presentation of results of a sequential explanatory design, and was thus used to inform the presentation of the CHW study results (Cote-LeClerc et al., 2017).

### **Sociodemographics**

Based on the number of certified community health workers in Ohio, the response rate was about 35%, or 49 out of 141. The majority of the survey respondents were female, which would be expected, as most CHWs are female. The average age among respondents was 47, with a minimum age of 27 years and a maximum age of 78 years. Thirty-seven (78.72%) of respondents were certified as Community Health Workers through the Ohio Board of Nursing. A majority (72.73%) of respondents had been working in the field for over 5 years, and only 6.82% responded as having been in the

field for less than 1 year. A similar trend was also found with how long respondents had been with their current employer, again with a majority (62.50%) having been with their employer for over 5 years, and 10.42% having been with them for less than one year. Out of 35 responses for places of employment as a CHW, the places that were most common were non-profits, health departments, and hospitals (Figure 1). Local worksites and for-profit organizations were not as common, and university and government employment only had one response for each (Figure 1). Of the responses, 76.32% of respondents for employment type stated that they were employed full-time as a Community Health Worker, while 10.53% were part-time as CHWs.

**Table 1: Demographic Data**

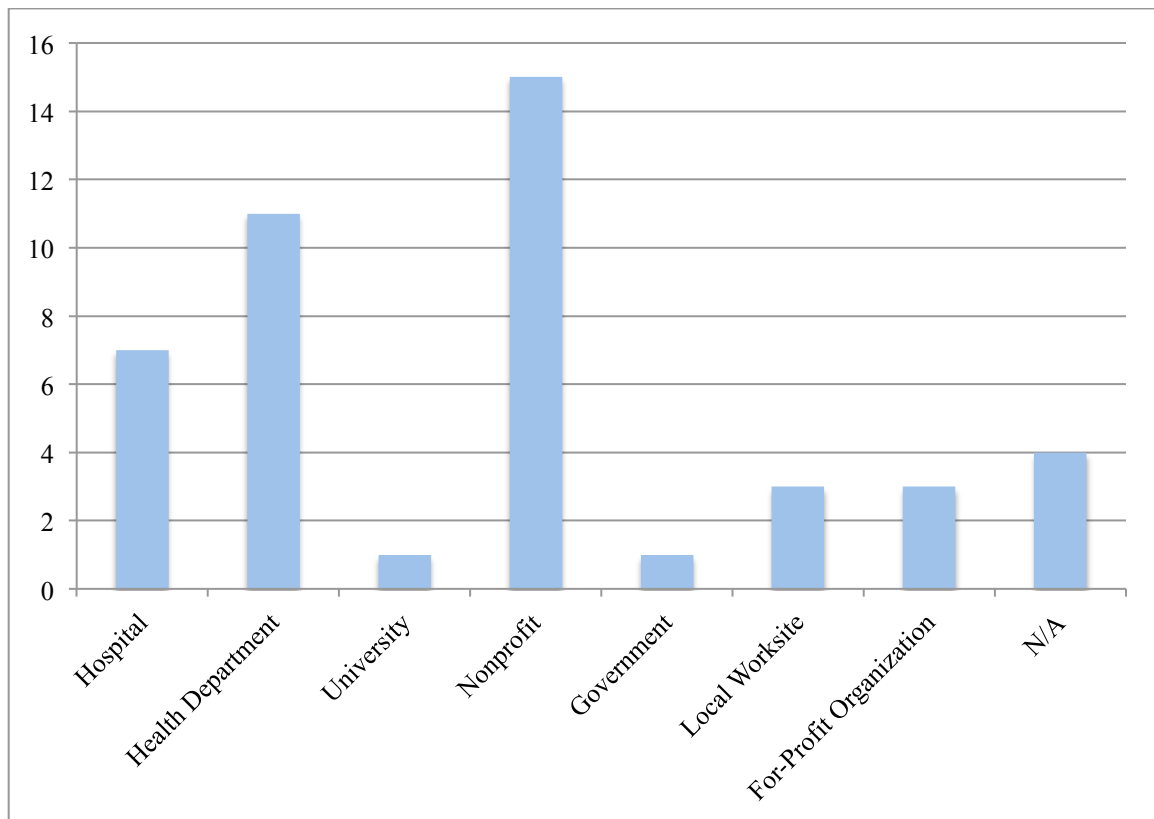
<b>Demographics</b>	
Number of respondents (survey)	49
Age (years), mean (SD)	47 (11.65)
Female, No. (%)	37/38 (97.4%)
Certified as CHW with Ohio Board of Nursing, No. (%)	37/47 (78.72%)
Worked in field for 5+ years, No. (%)	32/44 (72.73%)
Been with current employer 5+ years, No. (%)	30/48 (62.50%)
Number of key informants (interviews)	4

For what respondents considered as their main area of focus or area of practice, the most common responses brought up in the survey were pregnancy, general health, and maternal health/infant mortality. Social work, resource coordinating, and education were also popular responses as areas of practice. Some were very specific, with answers



of cancer, geriatrics, mental health, diabetes, and HIV. In terms of what prompted respondents to enter the field, making a difference or being passionate about the work was a highly seen response. Many respondents also stated that a job opportunity in the field was a reason for entrance into the field. Other seen responses were the CHW position aligning with their skills, interest in the job and working within the community, or finding the position during a change in career.

**Figure 1:** Respondents Area of Employment



Respondents were asked what their professional needs were, and top responses included more help and cooperation across areas that are involved in community health, need for more information, feeling of making a difference. Continued education and pay

were also stated as common professional needs. Somewhat common answers were time, resources, and financial support to be able to aid their patients in a more viable way.

When asked about specific areas that respondents wished they had more training in, many stated that they wished for more continued training in general, and some listed specific areas, such as drug users, infant mortality, and hypertension. Other areas that were mentioned as respondents having interest in learning more about were use of resources, marketing, and networking.

### **Continued Education**

Most of the informants from the key informant interviews stated that they were interested in and thought that continuing education was important, however, they were not satisfied with the way in which they were expected to get training. One informant expressed concern with the trainings offered by the Ohio Board of Nursing being too nursing oriented, and wanted trainings that were more geared towards the role of CHWs. The depth of the courses was also an area that was brought up as an issue. An informant stated that the courses that are offered are too small and most CHWs already know the information being presented because they know the basics already. Training that involved multiple areas of health providers was also stated as a desired opportunity in order to spur more cooperation between areas of healthcare. Other areas of interest for continued education that were brought up in the informant interviews were sexual education, mental illness, suicide, women's health, substance abuse, and overall wellness.

In the survey, question 9 asked if the CHW's employer required obtaining continuing education. Twenty-seven (58.70%) respondents answered yes, while nineteen (41.30%) answered no. Question 11 in the survey asked how that continued education

was obtained. Conferences, trainings, or seminars were mentioned in 16 of the responses, Continuing Education Units (CEUs) were mentioned in 7 responses, Ohio Community Health Workers Association (OCHWA)/CHW courses were mentioned in 6 responses, and employer provided continued education was mentioned in 5 responses. Online and free courses were also answers given by survey respondents. In the key informant interviews, more in-depth information was provided on continued education. There is identified need for continuing education programs specific to CHWs: *“I just think continuing education to move CHWs to a more advanced profession or amping up the funding for public health programming in the state of Ohio so that way CHWs could be put through use as public health professionals, which is really what we are.”* Lack of training in CHW areas, and too much focus on nursing trainings was also a problem identified in the key informant interviews: *“Our scope is so wide that we should be receiving training in a larger number in that aspect, rather than just simply having nursing trainings offered to us with this may or may not apply to us.”* In terms of what is most effective for continuing education experiences, patient interaction was brought up in multiple interviews as being an important and beneficial continuing education experience: *“Any educational experiences that would allow me to, be able to, sit with someone with an illness, and to be able to talk with them with some knowledge of exactly what they’re going through.”*

### **Challenges**

Common challenges that were brought up in the key informant interviews were a lack of respect from other members of the healthcare community, little cooperation or coordination between CHWs and health providers, regulation or oversight, and need for

continued education. Many interviewees spoke about not being treated as a part of the team that is involved in patient's healthcare, and being disrespected and looked down upon by physicians. The lack of being seen as a credible profession was displayed in a story by one of the informants: *"I believe, yeah, in fact, I had, there's a medical doctor who, actually, we were in a meeting and we were talking about the challenges and he said we need someone to beat the bushes and our pregnant women disappear on us and we don't know where they are and I said, well, that's why we need a connection between the health facility and the community health worker programs because if you have an issue with one of your clients or patients, you can, you know if you knew they were connected with community health workers than you could call us. And he said "oh, so we can help you do your job?" And I said, "No so we can help you do your job." You know? What? You just said you need someone to beat the bushes and that's what we do."* The requirement for CHWs to have continuing education was also stated as a challenge due to the employers telling them they must go to trainings, but not paying for it or allowing the employees to do it during work times.

### **Certification**

As shown in the survey data, a majority of the respondents who took the survey were certified as CHWs by the Ohio Board of Nursing. Those who were not stated that the subject matter and requirements were overly challenging, and that was why they opted to not get the certification. The cost, the training being too clinically oriented, and the fact that they did not feel they needed certification to get jobs as a Community Health Worker also were stated as additional reasons to not be certified as a CHW in the state of Ohio. Within the key informant interviews, the interviewees had ranging opinions on

certification and the process of becoming certified. One informant stated: *“I mean it’s the buzz, community health worker this, community health worker that. Uh, so, everybody jumped on the wagon to get them certified, but it’s just getting them certified. It’s not enough. So you get them certified to sit behind a desk. You get them certified to just do some manual stuff, or you get them certified where as they continuously become an important part of this healthcare process.”* Other informants also added that the certification did not change their jobs, and two had been working as CHWs in the community before being certified. However, one interview informant did state that they were advocating for the certification of a coworker, which demonstrates that the certification process, or simply being certified as a CHW is important.

### **Healthcare**

Healthcare was addressed in terms of resources and ability to aid in the healthcare of patients. One informant shared that they encourage their female patients to look for information on the internet and use that to help themselves or improve their quality of life. Another informant expressed concern that CHWs need to have a more extensive knowledge of resources and how to use them, because sometimes they do not get back with their patients with the resources that they have.

### **Financial**

Pay grade and funding were commonly stated issues within financial concerns associated with being a Community Health Worker: *“That’s the biggest discriminatory, um, it’s a deficit. Um although we are under the nurses, the nursing board hospice, our pay grade is considerably low. And when you compare to the means of a state worker and all the other 87 counties, there are people who make way more money than we do.”*

The actual pay the CHWs receive was brought up in multiple interviews, but funding outside of pay grade was also brought up a lot in the survey data and in the interviews. The funding issues are in the form of a lack of financial support for CHWs work with communities, so the communities cannot receive the help or resources that they may need. There was also the concern of budget and problems with timing of funds being distributed, or never having financial support because they cannot put it in the original budget.

### **Work**

As a multi-faceted profession, there was a wide range of work experiences and needs brought up in the data. Within the interviews, the issue of going into people's homes for work was brought up, and how that is difficult because they can see the issues within the home, but they cannot just focus and solve one issue when there are multiple others happening as well. Treating the whole person was an important area that was discussed in some of the interviews, and making sure to listen was also identified as an important part of the work. A specific area that one informant was particularly detailed with was the issue of domestic violence and dealing with that within CHW work. They discussed the multitude of efforts that go into getting someone out of a domestic violence situation, and how the skills associated with that are an important part of CHW work.

### **Community and Determinants of Health**

There were different community needs that were identified in the survey as well as the informant interviews. Within the interviews, the areas of need that were brought up were drug use, alcohol use, and suicide, as well as daily struggles of how to pay for their cars and houses. Other issues brought up were lack of employment and lack of

transportation. The combination of social and physical determinants of health was discussed in one key informants interview.

### **Purpose**

A few of the informants cited the job of CHW being a job that they felt passionate about. One interviewee summed up finding the position as: *“Actually it fell upon it. It wasn’t necessarily something I pursued, it pursued me I guess. It was just a natural progression of working in the community.”* There was also the mention of having a desire to aid in the solving of health issues within certain population, such as low-income communities, because they face difference barriers in obtaining access to health.

### **Word Cloud**

The information presented in the survey data was supplemented through the four key informant interviews, and those interviews were synthesized into a word cloud in order to better illustrate the results that informed the quantitative results. The largest words in the word cloud were found to be “community”, “health”, and “training” (Figure 2). These developed the ideas that were shown in the survey results of mentions of the need for more training opportunities to further professional development and continued education. Other noticeable words included “professional”, “lack”, “person”, and “care” (Figure 2). These words also highlight the issues brought up in the survey questions regarding needs of the CHWs to better help their communities. Many survey respondents identified a need for professional development through networking opportunities and continuing education, and these were also discussed in the interviews. The word cloud demonstrates the connection between the information and provides further evidence on the needs of the CHWs in Ohio.





doing. Networking and doing their own research were common answers, and continued education and trainings was also noted as a way in which CHWs stay current on best practices. The interviews furthered these answers, and revealed important information on the need for cooperation and coordination within healthcare in a way that involves and utilizes CHWs. In addition, a lack of respect and problems with professional oversight were also identified in the interviews, which helped develop the survey responses even more. Key informants brought up problems with CHW positions and abilities not being taken into account: *“Our positions are not taken as serious as it should be. As it should be. Our abilities are not taken into consideration for one thing as a community health worker.”* Issues with not being recognized across the field of healthcare were detailed in the interviews, which provided additional background on the need for cooperation identified in the survey responses: *“I would say my first professional challenge is being recognized as a legitimate provider of care and services by other members of the social service and health care field.”* In the interviews, doctors and nurses were commonly listed as other professions that the CHWs most often worked with. Coordination and respect of each other’s professions was an area that brought forth some issues: *“Because instead of them looking at us as an asset, they look at us as someone who’s just in the way.”*

Although we were able to gain a lot of information on Community Health Workers and their needs in Ohio, there were a series of limitations to this study. The study was only conducted with Ohio CHWs and there were only 49 survey respondents and four interviews. This small sample size could have impacted the results that were found. There was also a very clear majority of women who answered the survey, which

also could have skewed the data. In terms of figuring out how to evaluate the data, there were issues with finding specific research in the literature about the use and application of mixed method studies. There were a lot of studies that used mixed methods designs, but a lack of studies that looked at the actual formatting and evaluation of the use of those types of designs.

### **Conclusion**

The professional needs and challenges faced by Community Health Workers are multi-faceted and often times neglected in the state of Ohio. Through demonstrated needs in the CHW professional survey that were then detailed and expanded upon through the key informant interviews, issues with continued education, and coordination and cooperation across healthcare sectors were brought to light. As CHWs in Ohio are under the jurisdiction of the Ohio Board of Nursing, they do not have specifically tailored trainings or program requirements that help them develop their unique position in the healthcare field. In the future, there needs to be more utilization of Community Health Workers across healthcare sectors, and tailored programs for CHW continued education so that Ohio can obtain the greatest benefits of their position within healthcare, and in turn, best assist patients and the community. Additionally, the use of mixed methods in studies that benefit from the evaluation of multiple forms of data needs to be further researched and detailed so that studies such as this one can be properly analyzed and presented.

**References**

American Public Health Association. (2018).

Arvey, S. R., & Fernandez, M. E. (2012). Identifying the Core Elements of Community Health Worker Programs: A Research Agenda. *American Journal of Public Health, 102*(9), 1633-1637.

Cote-LeClerc, F., Duchesne, G. B., Bolduc, P., Gelinas-Lafreniere, A., Santerre, C., Desrosiers, J., & Lavasseur, M. (2017). How does playing adapted sports affect quality of life of people with mobility limitations? Results from a mixed-method sequential explanatory study. *Health and Quality of Life Outcomes, 15*(22).

Heimerl, F., Lohmann, F., Lange, S., & Ertl, T. (2014). Word Cloud Explorer: Text Analytics Based on Word Clouds. *System Sciences (HICSS)*.

doi: 10.1109/HICSS.2014.231

Ivankova, N. V., Creswell, J. W., & Stick, S. L. (2006). Using Mixed Methods Sequential Explanatory Design: From Theory to Practice. *Field Methods, 18*(1), 3-20.

National Academy for State Health Policy. (2017). *State Community Health Worker Models* [Data file]. Retrieved from <https://nashp.org/state-community-health-worker-models/>.

O'Brien, M. J., Squires, A. P., Bixby, R. A., & Larson, S. C. (2009). Role Development of Community Health Workers. *American Journal of Preventative Medicine, 37*(6), S262-S269.

Ohio Board of Nursing. (2018).

A SECONDARY DATA ANALYSIS OF THE PROFESSIONAL DEVELOPMENT 20  
NEEDS OF COMMUNITY HEALTH WORKERS IN OHIO

Olaniran, A., Smith, H., Unkels, R., Bar-Zeev, S., & van den Broek, N. (2017). Who is a  
community health worker? – a systematic review of definitions. *Global Health  
Action, 10*(1).

**Appendix 1: CHW Professional Survey**

CHW Professional Survey

Q1 Why did you choose to become a Community Health Worker?

Q2 Are you currently certified as a Community Health Worker with the Ohio Board of Nursing?

- yes
- no

Q3 If you are not currently certified by the Ohio Board of Nursing, what are the reasons for that? (check all that apply and rank them from most important to least important)

- subject matter and requirements are overly challenging
- cost
- not necessary to get CHW jobs
- training overly clinical in orientation

Q4 What education and/or professional certification(s) or license(s) do you possess?

Q5 What do you consider your area of focus or area of practice?

Q6 How long have you worked in your chosen field

- less than 1 year
- 1-3 years
- 5 or more years

Q7 How long have you been with your current employer?

- less than 1 year
- 1-3 years
- 5 or more years

Q8 What prompted you to enter your current position?

Q9 Does your employer require you to obtain continuing education?

- yes
- no

Q10 Does your professional certification(s) or license(s) require you to obtain continuing education?

- yes
- no

Q11 How do you obtain your continuing education, if required by employer and or professional certifying education?

A SECONDARY DATA ANALYSIS OF THE PROFESSIONAL DEVELOPMENT 22  
NEEDS OF COMMUNITY HEALTH WORKERS IN OHIO

Q12 Are you involved in any professional associations? Which organization(s)?

Q13 If so, how have you benefitted?

Q14 What are your top 3 needs as a professional?

Q15 How do you stay current on best practices and what others are doing in your field?

Q16 How do you access professional information? What sources?

Q17 Is there any area you wish you had more training in?

Q18 If so, what are you interested in receiving training in?

Q19 When you are trying to help a client meet a need, how do you obtain resources?

Q20 What are your top 3 biggest needs of your client population?

Q21 Where do you see yourself professionally in 2 years?

Q22 How can a professional association support you as a professional in your field?

Q23 Have you ever heard of the Ohio Community Health Worker Association (OCHWA)?

-yes

-no

Q24 Are you currently a member of the OCHWA?

-yes

-no

Q25 Are you interested in becoming involved in the OCHWA?

-yes

-no

Q26 What is your age?

Q27 What is your gender?

-female

-male

Q28 What is your current job title?

Q29 Place(s) of Employment while working as a Community Health Worker:

-hospital

-health department

A SECONDARY DATA ANALYSIS OF THE PROFESSIONAL DEVELOPMENT 23  
NEEDS OF COMMUNITY HEALTH WORKERS IN OHIO

- university
- non profit
- government
- local worksite
- for-profit organization
- N/A

Q30 Employment status/type of employment while working as a Community Health Worker:

- full time
- part time
- retired
- student
- self-employed
- unemployed by choice
- unemployed looking for employment
- graduate assistant
- N/A

Q31 List degrees:

**Appendix 2: Key Informant Interview Questions**

Determining the Professional Development Needs Among Community Health Workers  
in Ohio

1. What are your professional challenges as a community health worker?
2. What prompted you to pursue a position as a community health worker?
3. What are your challenges in obtaining professional development opportunities?
4. Please describe the last 5 continuing education experiences you participated in and describe the quality of your experience?
5. What types of continuing education experiences do you generally benefit from the most and why?
6. How does your employer encourage or prohibit your professional development?
7. From your perspective, what educational opportunities are most needed for community health workers in Ohio?
8. What other professionals do you interact with daily and how do they perceive your role and the benefits you provide to your client?

Key Informants will also be asked the following demographics:

1. What is your age?
2. Gender?
3. What is your current job title?
4. Where are you employed? What is your employment status?
5. Do you have any degrees? If, so, what are your degrees?
6. If you have a degree(s), what was your major/minor areas of concentration?
7. Do you have any certifications/accreditations/licensures?
8. How many years have you been working as a community health worker?