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ORIGINAL PAPER

Enhancing Community Health Worker Communication: Evaluating Simulation-Based Training in Motivational Interviewing

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Abstract
Community health workers act as essential links between underserved communities and healthcare systems, promoting equity, building trust, and addressing social determinants of health. To be effective, they need strong communication skills, such as motivational interviewing, which supports behavior change by encouraging self-motivation and resolving ambivalence. This evaluation examined the impact of simulation-based training on the motivational interviewing skills of community health workers enrolled in a structured workforce program. Community Health Worker trainees ($n=277$) attended a one-day session that included didactic lessons and simulations focusing on vaccine confidence, smoking cessation, and childhood obesity. Trainees' confidence was assessed through pre- and post-training surveys in three areas: engaging in conversations with people holding different opinions, applying motivational interviewing techniques, and using culturally appropriate resources to combat misinformation. Results showed significant improvements in confidence across all areas, with the greatest gain in engaging individuals with differing viewpoints, followed by applying motivational interviewing skills, and a smaller but meaningful increase in addressing misinformation. Qualitative feedback reinforced these findings, highlighting the value of realistic role-play, immediate feedback, structured preparation, and reflection. While further practice and long-term evaluation are necessary, simulation-based motivational interviewing training appears promising for enhancing community health workers' ability to promote behavior change and community engagement.

Keywords Community health workers · Motivational interviewing · Simulation training · Health communication

Introduction

Community health workers (CHWs) play a vital role in promoting health equity, delivering culturally sensitive care, and addressing the social determinants of health in underserved communities. CHWs are uniquely positioned to build trust and establish meaningful relationships with individuals who might be disconnected from the healthcare system. To improve their effectiveness, CHWs need a broad set of skills, including the ability to perform motivational interviewing (MI).

Motivational interviewing is a person-centered communication technique that promotes behavior change by exploring and resolving ambivalence [1]. Unlike directive approaches, MI seeks to evoke an individual's internal motivation for change through open-ended questions, reflective listening, and affirmations [2]. Motivational interviewing has been demonstrated to improve self-management habits among people with chronic illnesses [3]. A meta-analysis [4] found that MI was significantly more effective than traditional advice-giving in increasing clients' confidence to change, especially when combined with follow-up support.

CHWs often encounter individuals facing significant barriers to adopting healthier behaviors, such as limited access to resources, low health literacy, and cultural stigmas. CHWs equipped with MI skills can provide culturally tailored guidance that addresses both medical and psychosocial aspects of chronic disease management. The ARCH-WAY program in Atlanta, Georgia, USA is an innovative effort to improve CHWs' training and effectiveness [5].

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Recognizing the crucial role CHWs play in delivering healthcare services, especially in underserved communities, ARCHWAY aims to equip CHWs with the skills and knowledge needed to address diverse health challenges. The program's 12-week curriculum includes 155 h of content, covering key topics such as mental health first aid, social determinants of health, trauma-informed care, population health, community outreach, engagement, capacity building, resilience, communication, care coordination, advocacy, emergency preparedness, and health promotion and disease prevention [5]. The curriculum dedicates didactic learning and simulation scenarios to MI, equipping CHWs with the knowledge, skills, and competency to motivate and support clients in making informed, positive health choices.

Along with theoretical knowledge, ARCHWAY provides hands-on training through 20 h of simulation exercises, including MI practice, and 80 h of experiential learning through field placements. This practical approach enables CHWs to apply MI techniques in real-world situations, enhancing their ability to communicate and connect with communities.

Methods

Design and Objectives

This project evaluated structured, simulation-enhanced training on MI skills among CHW trainees enrolled in the ARCHWAY program. The training, which included experiential learning and real-time feedback, aimed to improve care quality by strengthening CHWs' ability to engage clients, support behavior change, and promote adherence to health recommendations.

Participants

Participants were CHW trainees enrolled in the ARCHWAY training program ($n=277$). All trainees completed the didactic and simulation components as part of their required curriculum.

Standardized Patients (SPs)

SPs are individuals trained in scenario role-play and providing targeted feedback based on the simulation's objectives. For this simulation, SPs were trained in MI techniques, allowing them to observe the trainees' use of these techniques.

Ethics Approval and Consent to Participate

Emory University Institutional Review Board determined that this educational initiative did not constitute human subjects research. All trainee surveys were voluntary and submitted anonymously, identifiable only by the date submitted. All trainees consented to participate in the simulation as part of the ARCHWAY curriculum.

Training Intervention

The intervention consisted of two sessions on the same day. A training day occurred every six weeks from January 2023 to May 2025. Each CHW trainee attended only one training day.

Morning Session: Didactic Instruction

The day began with a lecture on the core principles and techniques of MI, tailored to CHWs' roles. The 90-minute session highlighted practical MI strategies, including the OARS technique (Open-ended questions, Affirmations, Reflective listening, Summarizing, and Asking for Permission). Facilitators stressed the evidence supporting MI and its alignment with national quality care standards.

Afternoon Session: Simulation-Based Application

Trainees took part in simulation-based training designed to reinforce MI concepts through realistic practice and feedback. A 30-minute standardized pre-briefing session prepared trainees by explaining the use of SPs, expectations for active, safe, and non-judgmental participation, and the simulation's objectives. The objectives were (1) to help trainees build confidence in applying MI techniques during challenging conversations about health behavior change, and (2) to help trainees use trusted, neutral, and culturally appropriate resources to address myths and misinformation about health issues.

Trainees were divided into groups of 3 to 4 members and rotated through three scenarios illustrating common client challenges in community health: vaccine confidence, smoking cessation, and lifestyle changes for childhood obesity. Each scenario lasted 15 min, followed by 5 min of direct feedback from the SP, emphasizing the trainees' MI techniques and communication skills.

After the simulations, trainees participated in a one-hour debriefing session led by trained faculty. This guided discussion helped trainees reflect on their performance, identify areas for improvement, and discuss how MI could be integrated into their daily practice. The training was intentionally designed to encourage ongoing quality improvement

through continuous self-assessment, skill enhancement, and peer feedback.

Results

Using a mixed-methods approach, quantitative and qualitative questions were developed to ensure internal consistency between the two methods [6]. Confidence questions targeted three specific areas: (1) confidence in engaging in conversations with people holding different opinions; (2) confidence in applying MI skills to promote health behavior changes in clients; and (3) confidence in using trusted, culturally appropriate resources to combat health-related misinformation. These were administered as pre- and post-assessments using a Likert scale from 1 to 5, where 1 = Not at all confident, 2 = Slightly confident, 3 = Somewhat confident, 4 = Quite confident, and 5 = Extremely confident.

The open-ended questions followed immediately after the confidence ratings and focused on the aspects perceived as most beneficial and suggestions for improvement. By placing the confidence ratings and open-ended questions together in the survey design, the instrument directly connected confidence scores to the qualifying questions. This approach intentionally guided trainees to respond to the survey with greater depth and meaning, without overwhelming them with complex, wordy questions.

Quantitative Results

A series of paired-samples t-tests was conducted to assess changes in trainees' confidence before and after the simulation training across three domains. First, trainees rated their confidence in engaging in conversations with individuals who held differing opinions from their own. Trainees were then asked to rate their confidence in using MI skills to address health behavior change. Finally, trainees self-reported their confidence in using culturally appropriate resources to respond to health misinformation.

Trainees ($n=277$) reported greater confidence in engaging in conversations with individuals who hold differing opinions following the training, $t(276)=8.30$, $p<.001$. The corresponding effect size, $d=0.50$, 95% CI [0.47, 0.62], indicated a statistically significant moderate improvement from pre- to post-training.

Confidence in the ability to apply motivational interviewing (MI) skills also increased significantly, $t(276)=5.52$, $p<.001$, $d=0.33$, 95% CI [0.21, 0.45], suggesting a modest positive change in trainees' perceived competence to address health behavior change.

Trainees reported increased confidence in using culturally appropriate resources to connect with others and address misinformation, $t(276)=4.13$, $p<.001$, $d=0.25$, 95% CI [0.13, 0.37]. This reflects a small but statistically significant positive effect of the MI training and simulation exercises.

These results indicated that the MI training was effective in increasing trainees' confidence across all three domains. The strongest effect observed on trainee confidence was engaging across differences of opinion. Although the increase in confidence regarding culturally appropriate resources addressing health misinformation was smaller, it remained statistically significant and meaningful for the practical application of MI in community health worker roles.

Qualitative Results

The open-ended questions were intentionally brief yet direct, designed to elicit clear, concise responses on the most beneficial aspects and suggestions for improving the MI training. Responses were coded using grounded theory [7, 8], employing an inductive approach [9] to identify emergent themes through the benefits and recommendations responses. These responses were independently inductively coded by each of the three project team members and triangulated to ensure consistency and facilitate further discussion of the findings [6].

Realism and Contextualization of Training

Trainees consistently highlighted the value of the real-world encounters reflected in the MI simulations. SPs were MI-trained actors who provided feedback and embodied the role of clients in the community. The authenticity of the SPs and their interactions with the CHWs helped build confidence, reduce anxiety, and make the simulation feel real, applicable, and meaningful to the CHWs' roles. Several trainees noted how realistic scenarios helped them feel more prepared for actual practice:

"Getting comfortable with real-life situations."

Hands-on experience and know how to apply in the real situation.

Having live professional people.

The use of SPs and high-fidelity simulations created dynamic and immersive learning opportunities that centered on the relationships between the "client" and CHW:

> Being placed in the training simulation so that each individual can gain a hands-on learning experience [in] a session.

> I was exposed to real-life situations. They were relevant. I was given a chance to put what I had learned into real practice.

Other trainees pointed out how the diversity of the scenarios encouraged them to become more open-minded and adaptable:

> Realizing there are so many different scenarios. You must always be aware to never close your mind.

> An opportunity to practice engaging health practices and getting curious about resources and ways to assist.

One participant reflected more broadly on the ways the simulations helped them cultivate relationships across differences with empathy and understanding while remaining focused on providing care:

> In short, I was able to learn how to better relate to those who have different opinions and thoughts as myself and share information w/o looking to change their opinion — just give greater insight into mine and receive better insight into theirs without having the agenda of changing their opinion! I can relate on a human being level a lot better now….

Structure and Preparation Enhance Learning

Trainees also highlighted the importance of clear expectations, supportive facilitators, and time to prepare before starting the simulations. These teaching elements helped create a psychologically safe environment that encouraged CHW engagement and learning.

The pre-briefing and instructional components were described as critical for helping the CHWs orient themselves to MI practices and goals:

> The information given before time.

> Pre-brief helped me know what to expect.

> The most beneficial aspects of the training simulation was our teacher who explained us how the CHW training works — it was the most interesting thing I learned.

Trainees also reported that structured opportunities to try their skills and learn from peers deepened their understanding:

> Practice of skills just learned reinforced those skills and hearing from team members also helped the entire process.

> This training allowed me to exercise the skills I learned in a safe space.

> The opportunity to actively try my skills [with] feedback from the facilitator.

Reflection and Growth Through Feedback

Trainees identified feedback and debriefing as critical to processing their experiences and improving their use of MI techniques. These reflective elements supported deeper learning and increased confidence. Many trainees emphasized how real-time feedback from the SPs helped them refine their communication:

> The honest feedback received from the SPs.

> The real-life scenarios used to practice motivational interviewing and the quick, thoughtful feedback from SPs.

> Having actors who could improvise in response to the ways I conducted my interviewing. Their feedback was most beneficial and insightful.

> Relating and being open to feedback when dealing with situations.

> The real-world mannerisms and feedback on how to address certain situations.

> The simulation of self being able to talk to actual human being and getting feedback and reaction from a real-life person.

Discussion

This evaluation of a one-day, simulation-enhanced MI training provided promising evidence that targeted, experiential instruction can significantly boost CHWs' confidence in core communication and engagement skills. Trainees reported

notable improvements in confidence when speaking with people who hold different opinions, using MI techniques to promote health behavior change, and utilizing culturally appropriate resources to fight health misinformation. These findings emphasize how simulation-based training effectively reinforces communication strategies essential to CHW roles, especially when working with underserved populations facing complex health disparities.

Open-ended qualitative responses further reinforced the significance of realism, intentionally structured pedagogy, and reflective group discussions in the training. Trainees consistently emphasized the use of SPs, diverse and contextually appropriate scenarios, and immediate feedback as essential to their learning. These elements fostered an immersive, psychologically safe environment where CHWs could experiment with new communication techniques, make mistakes, and receive corrective input without fear of judgment. Trainees reported feeling more prepared for real-world interactions and appreciated opportunities to reflect on their performance and growth, both individually and through peer debriefing.

Opportunities for Improvement

While the MI training significantly improved CHWs' confidence, several ways exist to further enhance future versions. Some trainees expressed a desire for more time for role-playing and practice. A single day, although efficient, may restrict the depth of skill development. Extending the simulation or breaking learning into multi-day sessions could help achieve more substantial mastery, especially in areas with smaller impacts, such as using culturally appropriate resources to combat misinformation. SP-based simulations offer realistic scenarios, but they are expensive to implement, especially in low-resource settings where CHWs usually operate. Future MI training incorporating AI-enhanced virtual agents could be an alternative that warrants exploration.

Although the scenarios were generally representative, some CHWs suggested that including cases involving specific populations they frequently serve, such as recent immigrants, unhoused individuals, or people with low literacy, could improve the training. Customizing simulations to these experiences could increase relevance and boost confidence in applying MI across different situations.

Trainees generally appreciated SP feedback, but some comments showed variability in depth and clarity. Offering extra training for SPs on providing structured, behaviorally specific, and constructive feedback could enhance this part of the learning program. Trainees highlighted the importance of peer learning during debriefings. Future training could include structured peer coaching after the simulation (e.g., recorded role-plays with guided peer review) to promote ongoing development and maintain MI skills over time.

The trainers assessed confidence immediately after training; however, the long-term retention and transfer of MI skills to practice remain unknown. Implementing follow-up evaluations (e.g., at 3- or 6-month intervals) or direct field observation of CHWs could provide essential insights into the durability of training and its real-world effects on client outcomes. Integrating MI training into a broader continuous quality improvement framework could promote ongoing reflection and data-driven improvements. This might involve reflective practice logs, supervisory observation tools, and metrics tracking client engagement or changes in health behavior over time.

Limitations

Several limitations should be acknowledged when interpreting the results of this evaluation. The study relied on self-reported confidence metrics, which may be affected by social desirability or response bias. While trainees' perceptions of increased confidence are valuable, they do not directly measure actual skill development or the application of MI techniques in practice. Future assessments should incorporate objective methods, such as structured observations, standardized scoring of simulation performance, or real-world evaluations, to validate self-report data and more accurately assess competency.

The timing of the post-assessment immediately after training limits the ability to assess long-term retention or skill transfer. Confidence gains may decrease over time if there are no opportunities for reinforcement. Follow-up assessments over a period would help determine how lasting the training effects are and how effectively trainees incorporate MI into practice. Due to the one-day nature of the training, the trainers were unable to examine the impact of repeated simulation exposure or the potential benefits of sustained mentorship, coaching, or reflective practice.

All trainees were enrolled in the ARCHWAY program and received MI training as part of their required curriculum. Therefore, the findings may not be applicable to CHWs in different organizational settings or with varying levels of prior training. The absence of a comparison or control group also limits the ability to attribute the confidence gains solely to the simulation intervention, as other concurrent program elements could have contributed to the improvements.

Although the qualitative responses were rich and meaningful, they were gathered from brief open-ended prompts and might not fully reflect the depth or subtlety of trainees' experiences. Also, themes were coded inductively by the project team without external validation. Using more

structured qualitative interviews or focus groups could provide deeper insights into participant learning and potential areas for improvement.

Implications for Practice

This evaluation emphasizes the potential of simulation-enhanced MI training to improve CHWs' communication and engagement skills in complex, real-world interactions. Using SPs, authentic scenarios, and immediate feedback creates a psychologically safe environment for CHWs to develop and refine their MI skills. These elements can be integrated into existing public health training programs to encourage experiential learning and greater engagement. Although a one-day training has shown clear benefits, long-term support strategies such as peer coaching, mentorship, and regular booster sessions may be necessary to sustain skills and ensure consistent application in the field.

Agencies employing CHWs should consider integrating MI education into orientation and ongoing training efforts. This method can be adapted for other public health and clinical environments where concise, impactful communication training is necessary. The MI curriculum and simulation approach offer a reproducible framework that can be tailored to local priorities, client populations, and workforce requirements.

Conclusion

This evaluation of a simulation-based MI training demonstrated the feasibility and effectiveness of integrating experiential learning into CHW education. Trainees reported significant increases in confidence in three key areas: (1) engaging in conversations across differences, (2) applying MI techniques to support health behavior change, and (3) utilizing culturally appropriate resources to fight misinformation. Qualitative results confirmed the importance of realistic scenarios, structured practice, and immediate feedback in fostering meaningful learning experiences.

The results revealed that even one day of focused, simulation-enhanced MI training can significantly improve CHWs' ability to manage complex client interactions. Since they play a critical role in advancing health equity, CHWs benefit from training approaches that emphasize empathy, adaptability, and clear communication.

While further research is needed to assess long-term outcomes and the transfer of skills into practice, this training evaluation data supports making MI training a key part of CHW workforce development. Including such training in public health curricula and ongoing professional development can enhance the quality of care that CHWs provide and boost their ability to support behavior change in their communities.

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Declarations

Conflict of interest The authors certify that they have no conflicts of interest to disclose.

References

1. Lundahl, B., Moleni, T., Burke, B. L., Butters, R., Tollefson, D., Butler, C., & Rollnick, S. (2013). Motivational interviewing in medical care settings: A systematic review and meta-analysis of randomized controlled trials. *Patient Education and Counseling*, *93*(2), 157–168. https://doi.org/10.1016/j.pec.2013.07.012
2. Miller, W. R., & Rollnick, S. (2013). *Motivational interviewing: Helping people change* (3rd ed.). Guilford Press.
3. Cole, S. A., Sannidhi, D., Jadotte, Y. T., & Rozanski, A. (2023). Utilizing motivational interviewing and brief action planning to adopt and maintain positive health behaviors. *Progress in Cardiovascular Diseases, 77*, 86–94. https://doi.org/10.1016/j.pcad.2023.02.003
4. Rubak, S., Sandbæk, A., Lauritzen, T., & Christensen, B. (2005). Motivational interviewing: A systematic review and meta-analysis. *The British Journal of General Practice, 55*(513), 305–312.
5. Swan, B. A., Phan, Q., Crawford, K., Febres-Cordero, S., Kaligotla, L., Chicas, R., Giordano, N. A., Brasher, S., Chance-Revels, R., Spaulding, A., & Steiger, L. (2024). Archway: An innovative educational program advancing the public health workforce. *Archives of Public Health*. https://doi.org/10.1186/s13690-024-01422-1
6. Johnson, R., & Christenson, L. (2017). *Educational research: Quantitative, qualitative, and mixed approaches* (6th ed.). SAGE Publishing.
7. Glaser, B. G. (1965). The constant comparative method of qualitative analysis. *Social Problems*, *12*(4), 436–445. https://doi.org/10.2307/798843

8. Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Main 5th floor HM48. G43: Aldine Publishing.
9. Bendassolli, P. (2013). Theory building in qualitative research: Reconsidering the problem of induction. *Forum: Qualitative Social Research, 14*(1). https://doi.org/10.17169/fqs-14.1.1851