

Influence of Cultural Competence Training among Health care Workers on Patient Satisfaction and Health Outcomes in Diverse Communities

Abstract

This study aimed at exploring impact of cultural competence training on enhancing patients satisfaction and improving health outcomes within such communities

Study design: Analytical- cross sectional study design approach was applied in this study, both qualitative and quantitative methods were utilized to collect data. Relationship between cultural competence training and its effects on patient satisfaction and health outcomes was examined as well as mechanisms through which cultural competence training influences healthcare delivery in diverse settings was explored.

Place and Duration of Study: The study was conducted in Kiambu Level 5 Hospital in Kiambu County, Kenya. This region hosts a mixed population with varying cultures, and it is a level 5 hospital with high referrals of various cases from different parts of the county.

The area provided conducive environment for this study since it borders Nairobi and its population comprises of people from diverse communities with cultural practice and beliefs. The study took a period of six months, from September 2023 to March 2024.

Methodology: The study used random sampling to sample all healthcare providers and head of departments were selected. A sample of 156 Health care Workers was considered for the survey. Cochran's formula for finding sample size in large populations was applied to determine the sample size. The study utilized two primary research instruments a structured questionnaire and an interview guide. Ethical approval was attained from the relevant authority.

Results: The study found that cultural competence training positively affects patient adherence to treatment plans, with a Chi-square value of 9.11 and a p-value of 0.0202,

Conclusion: The cultural competence training programs significantly benefit healthcare delivery by improving providers' communication effectiveness, trust-building, and overall patient satisfaction

Recommendations: Training of cultural competence resulting in patients satisfaction and health outcomes is not only essential for healthcare professionals but also for policymakers, educators, and healthcare organizations committed to promoting equity and inclusivity in healthcare deliver

Key words: Cultural Competence, Patient Satisfaction, Health Outcomes & Healthcare Delivery.

INTRODUCTION

In today's increasingly diverse healthcare landscape, the influence of cultural competence training on patients' satisfaction and health outcomes holds significant importance. As healthcare providers strive to deliver high-quality care to individuals from varied cultural backgrounds, understanding the nuances of cultural competency becomes paramount. Cultural competence encompasses the ability to effectively navigate and communicate with patients from diverse ethnic, racial, religious, and socioeconomic backgrounds, ensuring that healthcare services are tailored to meet their unique needs and preferences. In the United States, cultural competence training is a long-established component of medical education and professional development (Reading & Wien, 2009). There is also a need for cultural competence in healthcare in Africa because the continent has an extremely large and diverse population, with considerable disparities in health outcomes (Betancourt et al., 2005).

Responding to this, countries have now started to concentrate on culturally competent care. For example, in South Africa, training on cultural competence has been included in the medical curriculum and continuing professional development programs. (Mhlongo, 2016) noted that this training has led to improved patient-provider relationships and better health outcomes in multicultural settings. In Kenya, cultural competence is particularly important in rural and under-served areas where cultural beliefs and practices significantly influence health behaviors and outcomes. Research has shown that cultural competence training positively influences healthcare delivery in the countries, among which Kenya is not an exception; it should be provided in consideration of the existing diverse cultures in communities.

Despite advances in health care, current day delivery of health care still remains characterized by health disparities and patient dissatisfaction, especially among diverse populations. Further, these cultural misunderstandings also have a direct consequence: communication barriers

between patients of different cultural orientations and their healthcare providers. Even though cultural competence training is currently practiced in several healthcare settings and developed, its improvement in aspects like patient satisfaction, outcome, and healthcare delivery in general leaves quite much desired. Further implementation and sustainability challenges of training programs in health organizations have to do with the programs themselves. The current study, thus, will focus on ascertaining the influence of cultural competence training among healthcare providers in serving culturally diverse communities toward patient satisfaction with health outcomes, through mechanisms by which the training impacts health care delivery. It also helps to establish barriers and facilitators to implementing the cultural competence training programs while, on the other hand, giving evidence-based recommendations for the improved involvement of the program

Cultural competence education is a key factor in improving patient satisfaction, especially in diverse populations. In first world countries, it improves satisfaction scores, like in the United States. For example, (Beach et al., 2005) showed that patients became more satisfied when cultural sensitivity and awareness were shown by health worker.

Cultural competence training is important in the entire process of health, from patient adherence to treatment plans to the reduction of disparities. The (Van Ryn and Fu 2013) study in the U.S. indicated that patients would adhere more to their treatment regimens if their providers were culturally competent. Similarly, in Canada, training in cultural competence is related to more positive health outcomes and, therefore, less health disparities within indigenous populations (Reading & Wien, 2009). In Kenya, cultural competence training has been a key strategy in improving health outcomes and reducing disparities, especially in rural areas (Constantinou et al., 2022). The studies point to the fact that overcoming cultural barriers

through training can lead to better health outcomes and more equitable health care.

The barriers and facilitators to the implementation of cultural competence training programs across healthcare organizations are very diverse. In the United States, one of the barriers identified is the lack of support from organizational leaders and associated resources, where strong organizational commitment and availability of qualified trainers facilitate this implementation (Horvat et al., 2014). Implementation of cultural competence training as part of a regular professional development curriculum in the Netherlands has been successful (Truong et al., 2014). In Kenya, however, barriers include those of the same order as for other countries: lack of resources and constraints on time

MATERIAL AND METHODS

This was a cross section design study with both qualitative and quantitative approach. The study was conducted at Kiambu Level 5 Hospital in Kiambu County, Kenya.

This region hosts a mixed population with varying cultures, and it is a level 5 hospital with high referrals of various cases from different parts of the county. The study area provided conducive environment since it borders Nairobi and its population comprises of people from diverse communities with diverse cultural practice and beliefs. The study took a period of six months, from September 2023 to March 2024. The study used random sampling to sample all healthcare providers and head of departments were selected. A sample of 156 Health care Workers was considered for the survey. Cochran's formula for finding sample size in large populations was applied to determine the sample size. The study utilized two primary research instruments a structured questionnaire and an interview guide. Ethical approval was attained from the relevant authority.

RESULTS AND FINDING

Table 1: Cultural competence training on patient satisfaction among healthcare providers serving diverse communities

	SA	A	N	D	SD	Chi-square value (df, n, χ)	P-value
Test Item	F (%)	F (%)	F (%)	F (%)	F (%)		
Cultural competence training has improved my ability to address patients' cultural needs effectively.	18 (11.7%)	37 (24.0%)	28 (18.2%)	39 (25.3%)	32 (20.8%)	(4, 154, p = 23.132)	0.02979
Patients from diverse backgrounds report higher satisfaction with my care following cultural competence training.	26 (16.9%)	32 (20.8%)	48 (31.2%)	26 (16.9%)	22 (14.3%)	(4, 154, p = 3.398)	0.04587
I feel more confident in interacting with patients from different cultural backgrounds as a result of cultural competence training.	20 (13.0%)	24 (15.6%)	26 (16.9%)	35 (22.7%)	49 (31.8%)	(4, 154, p = 14.453)	0.03681
Cultural competence training has increased my understanding of the cultural preferences of my patients.	26 (16.9%)	47 (30.5%)	18 (11.7%)	35 (22.7%)	28 (18.2%)	(4, 154, p = 29.091)	0.01512
The training has helped me develop skills that enhance patient satisfaction during consultations.	33 (21.4%)	45 (29.2%)	23 (14.9%)	29 (18.8%)	24 (15.6%)	(4, 154, p = 16.200)	0.03529
Overall, cultural competence training has had a positive effect on patient satisfaction in my practice.	37 (24.0%)	43 (27.9%)	33 (21.4%)	26 (16.9%)	15 (9.7%)	(4, 154, p = 32.098)	0.04650

Similarly, the study observed a noticeable reduction in health disparities, supported by a Chi-square value of 18.28 and a p-value of 0.0171. . The current study also reported an improved health outcomes, with a Chi-square value of 9.89 and a p-value of 0.017

The study observed a noticeable reduction in health disparities,

As shown in the table below

Table 2: Association between cultural competence training and health outcomes

Test Item	SA	A	N	D	SD	Chi-square value (df, n, χ)	P-value
	F (%)	F (%)	F (%)	F (%)	F (%)		
	After receiving cultural competence training, patients are more likely to adhere to their treatment plans.	27 (17.5%)	40 (26.0%)	38 (24.7%)	29 (18.8%)		
Cultural competence training has contributed to a noticeable reduction in health disparities among my patients.	28 (18.2%)	35 (22.7%)	29 (18.8%)	37 (24.0%)	25 (16.2%)	(4, 154, 18.28)	P = 0.0171
I observe improved health outcomes in patients from diverse backgrounds following cultural competence training.	34 (22.1%)	54 (35.1%)	28 (18.2%)	21 (13.6%)	17 (11.0%)	(4, 154, 9.89)	P = 0.017
The training has led to a more effective management of chronic conditions among culturally diverse patients.	35 (22.7%)	57 (37.0%)	33 (21.4%)	20 (13.0%)	9 (5.8%)	(4, 154, 13.8)	P = 0.0151
Cultural competence training has facilitated better communication with patients, leading to improved health outcomes.	24 (15.6%)	31 (20.1%)	69 (44.8%)	24 (15.6%)	6 (3.9%)	(4, 154, 5.5)	P = 0.0141
My practice has seen a reduction in health disparities as a direct result of implementing cultural competence training.	34 (22.1%)	41 (26.6%)	29 (18.8%)	28 (18.2%)	22 (14.3%)	(4, 154, 3.82)	P = 0.0325

cultural competence training leads to better health outcomes by allowing healthcare providers to deliver more personalized and effective care, which positively impacts patient health.

Their research demonstrated that cultural competence training enhances the management of chronic conditions through improved provider-patient communication and understanding of cultural contexts, leading to better health outcomes. This was demonstrated by patient adherence to treatment plans, with a Chi-square value of 9.11 and a p-value of 0.0202,

And the observed improvement in communication (Chi-square value of 5.5, p-value of 0.0141)

On Cultural competence and community engagement in healthcare delivery

The provided image illustrates an Amos path diagram that represents the multiple linear regression model used to analyze the influence of cultural competence and community engagement on healthcare delivery

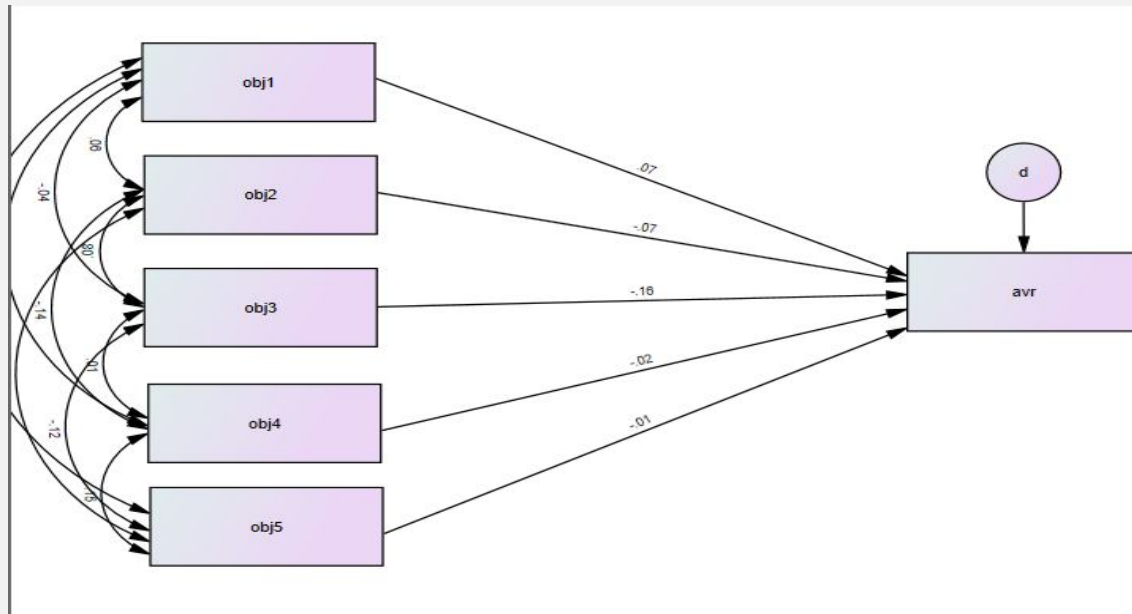


Figure 1 Community engagement in healthcare delivery

The diagram visualizes the relationships between the objectives of cultural competence and the overall effectiveness of healthcare delivery. The path coefficients indicate the strength and direction of these

relationships. For example, obj1 (perceived impact on patient satisfaction) has a positive influence on avr (0.07), suggesting that as cultural competence training is perceived to impact patient satisfaction more positively, the overall effectiveness increases. Conversely, obj3 (mechanisms of influence) has a negative coefficient (-0.16), indicating that certain mechanisms of cultural competence training might be perceived to decrease overall effectiveness.

DISCUSSION

On reduction in health disparities, This finding showed similar findings with (Sue et al., 2009) who founded that cultural competence training significantly reduces health disparities by improving healthcare providers' ability to interact with patients from diverse backgrounds, thus promoting more equitable healthcare delivery

On Cultural competence training this was supported by (Lie et al., 2011) who found that cultural competence training enhances communication between healthcare providers and patients, resulting in better patient satisfaction and health outcomes. Effective communication, as highlighted in their study, is crucial for understanding patient needs and providing personalized care. In summary, the study's results are consistent with existing literature, underscoring the significant role of cultural competence training in improving patient adherence, reducing health disparities, enhancing health outcomes, managing chronic conditions, and facilitating effective communication. These findings collectively highlight the value of cultural competence training in fostering equitable and high-quality healthcare. Representation of Culture competence and community engagement in healthcare delivery. The model provides a comprehensive view of how various aspects of cultural competence training interrelate and impact the effectiveness of healthcare delivery, highlighting areas that might need further attention to improve patient-centered care in diverse healthcare settings.

SUMMARY

The analysis highlights that such training improves providers' capacity to meet cultural needs, enhances patient satisfaction, and boosts providers' confidence in dealing with patients from varied backgrounds. Key findings include significant improvements in communication, trust-building, understanding of non-verbal cues, and patient-provider relationships. Furthermore, the study underscores that cultural competence training contributes to better health outcomes, reduced health disparities, and improved management of chronic conditions. Identified barriers include limited resources and lack of time, while facilitators involve organizational support, availability of qualified trainers, and staff engagement. Recommendations for enhancing training programs include regular updates, incorporation of participant feedback, practical scenarios, continuous professional development, collaboration with community leaders, and evidence-based review

CONCLUSION

Despite barriers such as limited resources and time constraints, the presence of facilitators such as organizational support and qualified trainers highlights pathways to successful implementation of the program. The impact of training was evidenced by not only patients' satisfaction but also health care workers. Good communication resulted to patients trust to their health care workers which made it easy to realize cultural barriers and address them accordingly.

RECOMMENDATIONS.

Evidence-based recommendations emphasize the need for regular updates and ongoing development to maintain the relevance and effectiveness of training initiatives. Overall, enhancing cultural competence training is crucial for addressing the needs of diverse The cultural competence training materials be frequently updated and provided by the governments in all African countries to incorporate the latest research and address emerging cultural issues. This practice ensures that the training remains relevant

and effective in tackling contemporary healthcare challenges.

The governments to include the practical scenarios and hands-on exercises in cultural competence training curricula. This approach helps healthcare providers apply learned skills in real-world situations, thereby improving their effectiveness in managing diverse patient interactions.

Disclaimer (Artificial intelligence)

Option 1:

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc.) and text-to-image generators have been used during the writing or editing of this manuscript.

Option 2:

Author(s) hereby declare that generative AI technologies such as Large Language Models, etc. have been used during the writing or editing of manuscripts. This explanation will include the name, version, model, and source of the generative AI technology and as well as all input prompts provided to the generative AI technology

Details of the AI usage are given below:

1. No AI app was used in this study

2.

3.

Reference

- Beach, M. C., Price, E. G., Gary, T. L., Robinson, K. A., Gozu, A., Palacio, A., Smarth, C., Jenckes, M. W., Feuerstein, C., Bass, E. B., Powe, N. R., & Cooper, L. A. (2005). Cultural competence: a systematic review of health care provider educational interventions. *Medical Care*, 43(4), 356–373.
<https://doi.org/10.1097/01.MLR.0000156861.58905.96>
- Betancourt, J. R., Green, A. R., Emilio Carrillo, J., & Park, E. R. (2005). Cultural competence and health

care disparities: key perspectives and trends. *Health Affairs (Project Hope)*, 24(2), 499–505.

<https://doi.org/10.1377/HLTHAFF.24.2.499>

Constantinou, C. S., Andreou, P., Nikitara, M., & Papageorgiou, A. (2022). Cultural Competence in Healthcare and Healthcare Education. *Societies*, 12(6). <https://doi.org/10.3390/SOC12060178>

Horvat, L., Horey, D., Romios, P., & Kis-Rigo, J. (2014). Cultural competence education for health professionals. *The Cochrane Database of Systematic Reviews*, 2014(5).

<https://doi.org/10.1002/14651858.CD009405.PUB2>

Lie, D. A., Lee-Rey, E., Gomez, A., Berekyei, S., & Braddock, C. H. (2011). Does Cultural Competency Training of Health Professionals Improve Patient Outcomes? A Systematic Review and Proposed Algorithm for Future Research. *Journal of General Internal Medicine*, 26(3), 317.

<https://doi.org/10.1007/S11606-010-1529-0>

Mhlongo, T. P. (2016). *Cultural Competency in South Africa: A nursing education perspective*. 6(16), 2225–0484. www.iiste.org

Reading, C., & Wien, F. (2009). NATIONAL COLLABORATING CENTRE FOR ABORIGINAL HEALTH
CENTRE DE COLLABORATION NATIONALE DE LA SANTÉ AUTOCHTONE. www.nccah-ccnsa.ca.

Sue, S., Zane, N., Hall, G. C. N., & Berger, L. K. (2009). The Case for Cultural Competency in Psychotherapeutic Interventions. *Annual Review of Psychology*, 60, 525.

<https://doi.org/10.1146/ANNUREV.PSYCH.60.110707.163651>

Truong, M., Paradies, Y., & Priest, N. (2014). Interventions to improve cultural competency in healthcare: A systematic review of reviews. *BMC Health Services Research*, 14(1), 1–17.

<https://doi.org/10.1186/1472-6963-14-99/TABLES/1>

Van Ryn, M., & Fu, S. S. (2003). Paved With Good Intentions: Do Public Health and Human Service Providers Contribute to Racial/Ethnic Disparities in Health? *American Journal of Public Health*, 93(2), 248. <https://doi.org/10.2105/AJPH.93.2.248>