# Improving Interprofessional Practice \& Cultural Competence with Interprofessional Education 

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## INTRODUCTION

Cultural Competency (CC) involves a person's awareness, empathy, and mindfulness of another's background including gender, sexual orientation, race, ethnicity, and religion in order to provide healthcare in an equitable manner. ${ }^{1}$ Many resources hav been targeted to recruiting health care workers for Indian Health Services in Oklahoma for the over 500,000 Native Americans from 39 federally recognized tribe (Figure 1). $\frac{2}{}$ However, minimal focus has been placed on CC with regards to Native American populations in future health providers. ${ }^{3}$ Within educational programs, CC can serve to optimize learning, reduce bias, increase awareness of disparities, and improve communication. 4

Figure 1: Ethnicity population data comparison in Oklahoma from 2010 and 2021.


## OBIECTIVES

To identify the impact of a Diversity, Equity, and Inclusion IPE single-day event on the perceptions of interprofessional practice and ability to provide culturally competent care in students enrolled in Doctor of Osteopathy (DO), Pharmacy, and Athletic Training (AT) education programs.

## METHODS

An experimental pre- and post-design utilizing measures of CC knowledge with the conference as the intervention. Participants included students (205 pre and 200 post) enrolled in healthcare programs at two Midwestern universities who completed the Tool for Assessing Cultural Competence Training (mTACCT) that included three CC presentations and two case studies with small group discussions. Due to uneven sample sizes in the pre- and post-test, and violations of normality and homogeneity of variance, Kruskal Wallis tests were used to assess differences in the intervention.

Participants


## Key Findings

$\checkmark$ Students recognized a deficiency in their cultural competency but demonstrated a desire for greater understanding.
$\checkmark$ Students improved their ability to identify bias and stereotyping in healthcare

| Table 1: Chi square results. | D |  |  |
| :---: | :---: | :---: | :---: |
|  | $X^{2}$ | F | Sig |
| Disparities 1: Define race, ethnicity and culture | 12.26 | 4 | 0.02 |
| Disparities 2: Identify patterns of national data | 18.15 | 5 | 0.00 |
| Disparities 3: Describe patterns of health disparities | 24.56 | 4 | 0.00 |
| Disparities 4: Identify key areas of disparities | 39.24 | 4 | 0.00 |
| Disparities 5: Discuss barriers to eliminating health disparities | 56.87 | 5 | 0.00 |
| Disparities 6: Concretize epidemiology of disparities | 32.42 | 5 | 0.00 |
| Disparities 7: Gather and use data | 32.64 | 4 | 0.00 |
| Disparities 8: Critically appraise literature on disparities | 28.17 | 5 | 0.00 |
| Disparities 9: Recognize disparities amenable to intervention | 28.78 | 4 | 0.00 |
| Disparities 10: Value eliminating disparities | 42.19 | 4 | 0.00 |
| Bias 1: Identify how race and culture relate to health | 31.15 | 4 | 0.00 |
| Bias 2: Identify healthcare provider bias and stereotyping | 45.45 | 4 | 0.00 |
| Bias 3: Demonstrate strategies to address/reduce bias | 34.19 | 4 | 0.00 |
| Bias 4: Describe strategies to reduce provider bias | 40.74 | 5 | 0.00 |
| Bias 5: Show strategies to reduce bias in others | 48.86 | 4 | 0.00 |
| Bias 6: Value the historical impact of racism | 57.59 | 4 | 0.00 |
| Communication 1: Recognize patients' healing traditions and beliefs | 51.32 | 4 | 0.00 |
| Communication 2: Describe cross-cultural communication | 57.68 | 4 | 0.00 |
| Communication 3: Discuss race and culture in the medical interview (history) | 44.17 | 4 | 0.00 |
| Communication 4: Elicit a culture, social, and medical history | 56.08 | 5 | 0.00 |
| Communication 5: Use appropriate assessment tools | 68.89 | 4 | 0.00 |
| Communication 6: Elicit information in family-centered context | 69.52 | 4 | 0.00 |
| Communication 7: Use negotiating and problem-solving skills | 75.97 | 4 | 0.00 |
| Communication 8: Assess and enhance adherence | 65.39 | 4 | 0.00 |
| Communication 9: Respect patient's cultural beliefs | 128.9 | 3 | 0.00 |
| Communication 10: Nonjudgmental listening to health beliefs | 146.7 | 3 | 0.00 |

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## CONCLUSION

Though outcomes were significant, research indicate that CC should be incorporated in all levels of curricula or students to have sufficient understanding for application to patient centered care. Practitioners in Oklahoma may encounter patients from varying cultures including Native American nations. Cultural Competence efforts may improve healthcare in Native Oklahoma. Cultural competence (CC) training was found to significantly increase awareness of and ability neutralize biases regarding CC. Vital aspects of CC such as students' ability to identify key areas of disparity (Disparity 4), identify healthcare provider bias and stereotyping (Bias 2), and non-judgmental listening to health beliefs (Communication 10) were greatly enhanced. Healthcare providers' abilities to help close the equity gap necessitates their ability to identify problems, assess one's own culpability, and create logistical solutions to non-equitable care. Negating provider bias should help decrease negative stereotyping across the intersectionality of population providers are likely to encounter. As well, improved provider listening may potentially lead to greater understanding of patient healthcare
autonomy. Continued emphasis on CC should be stressed throughout the education process across all healthcare professional training programs. Healthcare utcomes specifically in Oklahoma should see a stark utcoease in competent and empathetic providers with real entinued educational commitments in the graduate level.

## REFERENCES

1. Cartwright LA, Shingles RR. Cultural Competence in
Published online 2011. doi: $10.5040 / 9781718209626$ Published online 2011. doi:10.5040/9781718209626 2. Data. USA ALs. Published September 17, 2019. Accessed August 16 , 3. Willsing CE, Sommerfeld DH, Jaramillo ET, et al. Improving Native American elder access to and use of health care through effective health system navigation. BMC Health Serv Res. 2018;18(1). 4. Sanchez TR, Plawecki JA, Plawecki HM. The delivery of culturally sensitive health care to Native Americans. $J$ Holist Nurs. 1996;14(4):295-307.

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