Cultural Competency Education for Clinical Researchers to Improve Minority Participation in Clinical Trials

LaQuita (Nikki) Snow, MSN, FNP-C; Deborah Baker DNP, CRNP; Rita D'Aoust PhD, ANP-BC, CNE, FAANP, FNAP, FAAN; Emilia Liana Falcone, MD, PhD, FRCPC

JOHNS HOPKINS SCHOOL *of* NURSING

Background & Significance

- Ethnic and racial minorities represent 1/3 of the population but characterize 18% of the total participants in clinical research studies in the U.S.
- In 2018, NIH reported 29 of total research participants identify as minorities but only 9% were ethnic minorities
- Indigenous, Latinx, Black populations, >3-fold increase in health disparities during COVID-19 pandemic but vastly underrepresented in clinical research

Barriers		
Hyper-focus on data/ outcomes	Attitudinal & behavioral barriers (between researcher & participant)	Cultural discordance
Performative diversity agendas; only workplace-related cultural competency training	Lack of representation with clinical team & leadership	Poor communication (language, religious, etc.)
History of mistreatment of minority populations in healthcare & research	Implicit bias	Superficial engagement between participant & research staff

Purpose & Aims

Purpose: Address barriers, normalize participation, and enhance researcher-participant engagement in the recruitment stage and throughout clinical trial participation

Aim #1: To educate clinical research provider and staff on the positive effects of cultural competency education on improving research participant:

Recruitment	Enrollment	Engagement	Retention
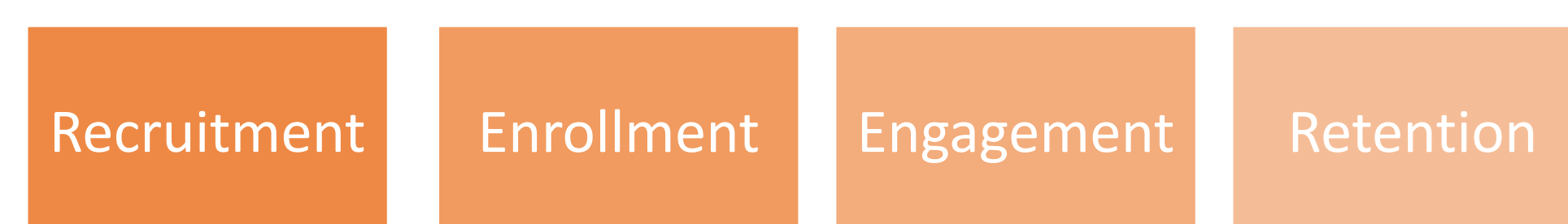
Aim #2: To increase NIH provider/research staff cultural awareness and knowledge

Aim #3: To increase NIH provider/research staff awareness and knowledge of implicit bias

Aim #4: Determine the acceptability of integrating program into the organization's standard training

Methods

Design: Pre-/post test
Setting: large research organization
Data Collection: 6 weeks between October 2021 through November 2021, captured via Qualtrics
Intervention: 60-90 minute, virtual cultural competency & implicit bias educational program, via Canvas. Optional de-brief for project participants.
Measures: Cultural Diversity Questionnaire for Nurse Educators (CDQNE-R) & Stratis Health's Implicit Bias for Healthcare Provider's quiz; measured satisfaction scores evaluating feasibility
**Analysis**: Wilcoxon Signed-Ranks test; Descriptive and frequency statistics

Sample

- 24 clinical researchers/staff involved in the direct clinical study activities, patient care, and recruitment activities including Nurse Practitioners, Physician Assistants, Research scientists, Fellows, Post-baccalaureate or doctorate graduates
- Spanish-speaking, non-White participants scored higher on cultural competency and implicit bias questionnaires
- Nursing professionals scored higher than Associate & Principal Investigators

Demographic characteristics	(N = 24)
Age, mean (SD)	47.2 (10.29)
Gender Identity, n (%)	
Male	1 (3.7)
Female	23(85.2)
Highest degree, n (%)	2 (7.4)
Associates	1 (3.7)
Bachelors	3 (11.1)
Masters	16 (59.3)
PhD	2 (7.4)
MD	3 (11.1)
Role in research	
Clinical Research Nurse/Research Nurse	7 (25.9)
Licensed Independent Provider (PA, NP)	9 (33.3)
Study Coordinator	2 (7.4)
Principal Investigator (PI)	2 (7.4)
Associate Investigator (AI)	3 (11.1)
Other	3 (11.1)
Languages other than English	
None	13 (48.1)
Spanish	4 (14.8)
French	5 (18.5)
Arabic	1 (3.7)
Other	3 (11.1)
Years in healthcare, mean (SD)	19.2 (12.1)
Years in clinical research (SD)	11 (9.7)
Ethnicity	
Hispanic/Latinx	3 (11.1)
American Indian or Alaska Native	1 (3.7)
Asian	1 (3.7)
Black or African-American	7 (25.9)
White	15 (55.6)

Results

Aim #1

Aim #2-3
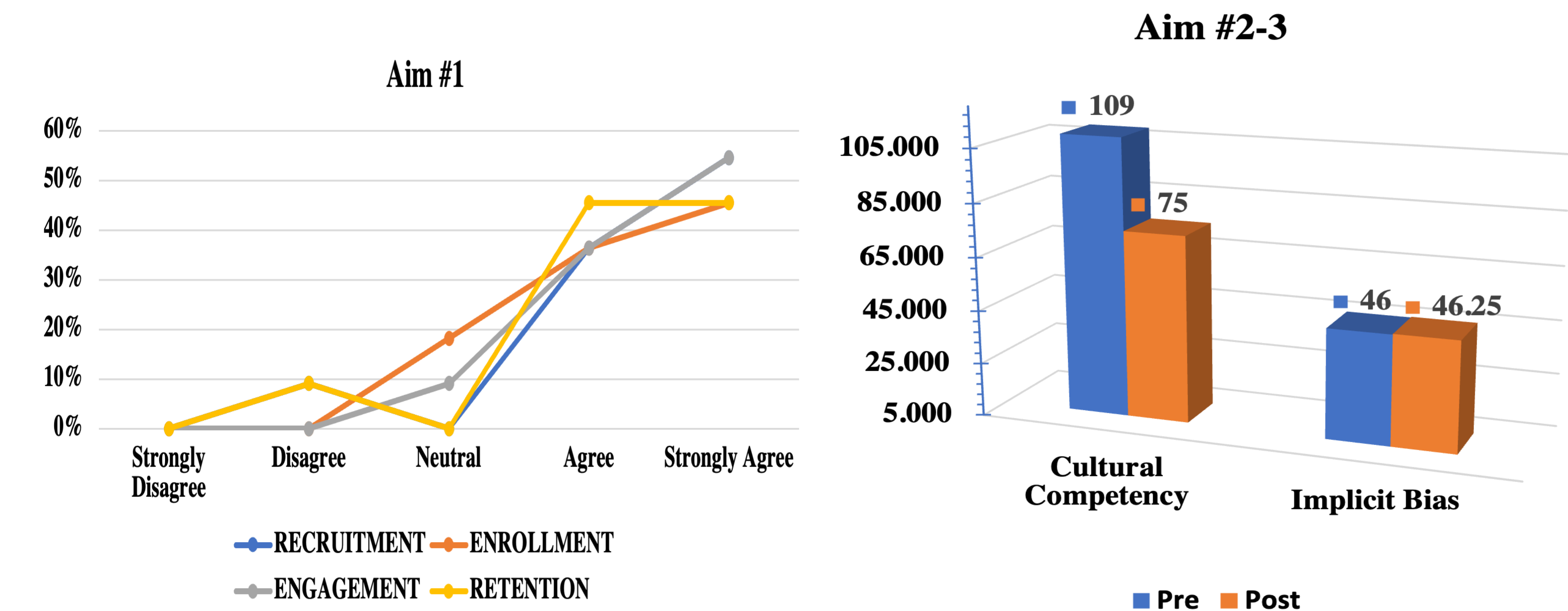
- 55% report that 1-1.5 hour(s) was enough time to complete the course and would recommend this course to a colleague
- 64% report that the course defined and discussed cultural competency and implicit bias in clinical research

Conclusion

- Cultural competency & implicit bias training is in demand by both organization and staff
- While there was no improvement in cultural competency, implicit bias awareness and knowledge improved
- Implicit bias and cultural competency education can reduce attitudinal and behavioral barriers to recruitment, engagement, & retention
- Adds to current research that bridges the gap between inadequate minority representation in research and national health disparities
- With a larger sample size, cultural competency training can be effectively integrated into organizational onboarding training to improve recruitment, enrollment, engagement, and retention

References

Scan QR code for full reference list