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## Background

- Perimenopause represents a risk for new onset or exacerbation of mental health conditions.
- Vasomotor symptoms (VMS), cognitive changes, sleep disruption and sexual dysfunction are common complaints and overlap with common psychiatric disorders.
- Significant racial/ethnic disparities in the menopause experience are evident. Compared to White women,
  - Black/African Americans are 8x at higher risk for earlier menopause and experience more severe VMS.
  - Chinese and Japanese women report fewer VMS.
  - Hispanic women report significantly more changes in mood, energy levels, and vaginal dryness.
- Education of physicians and other clinicians has lagged behind advances in knowledge.
  - Surveys of ob/gyn and internal medicine training programs indicate that most programs offer only limited training in menopause care.
  - Training in reproductive psychiatry as a field is underrepresented, and even in programs that do offer training, approximately 30% do not include any content about perimenopause.

## Goal

The Menopause and Minority Health Project aimed to reduce diagnosis and treatment disparities for racially and ethnically diverse individuals experiencing menopause by improving provider knowledge and treatment approaches using an innovative and evidence-based curriculum.

## Methods

- The curriculum was delivered via 7 weekly 1- hour sessions via zoom .
- Each module was enhanced with Extended Reality (XR) simulations using diverse avatar patients.
- Course improvements between cohort included ongoing instruction on utilizing the avatar experiences and implementation of live feedback on interactions with the avatar via a scoring system.
- Participants completed pre- and post-test assessments and provided qualitative feedback about their overall experience.

## Project Experience

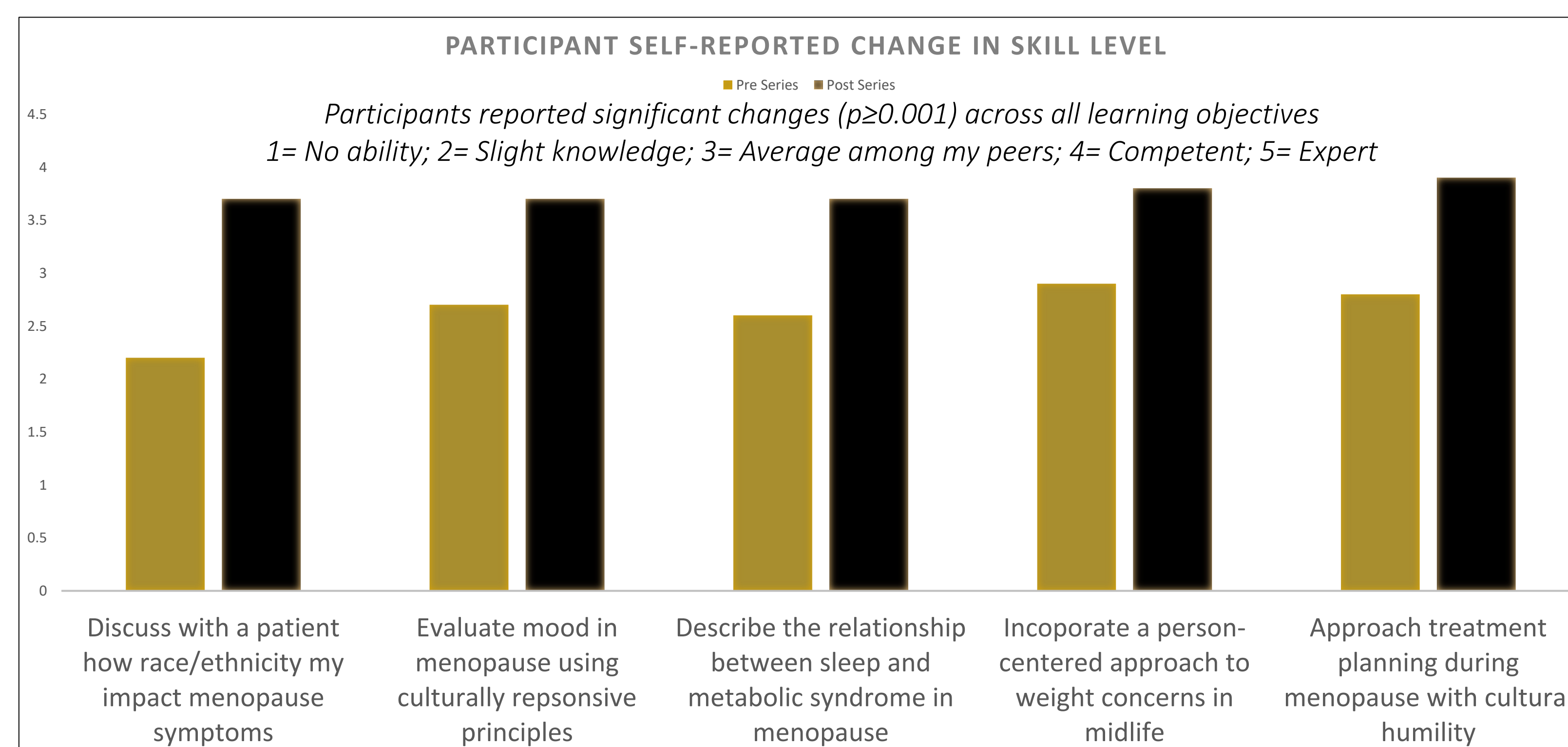
Example Schedule with Core Topics

Example Avatar Patients

## Results

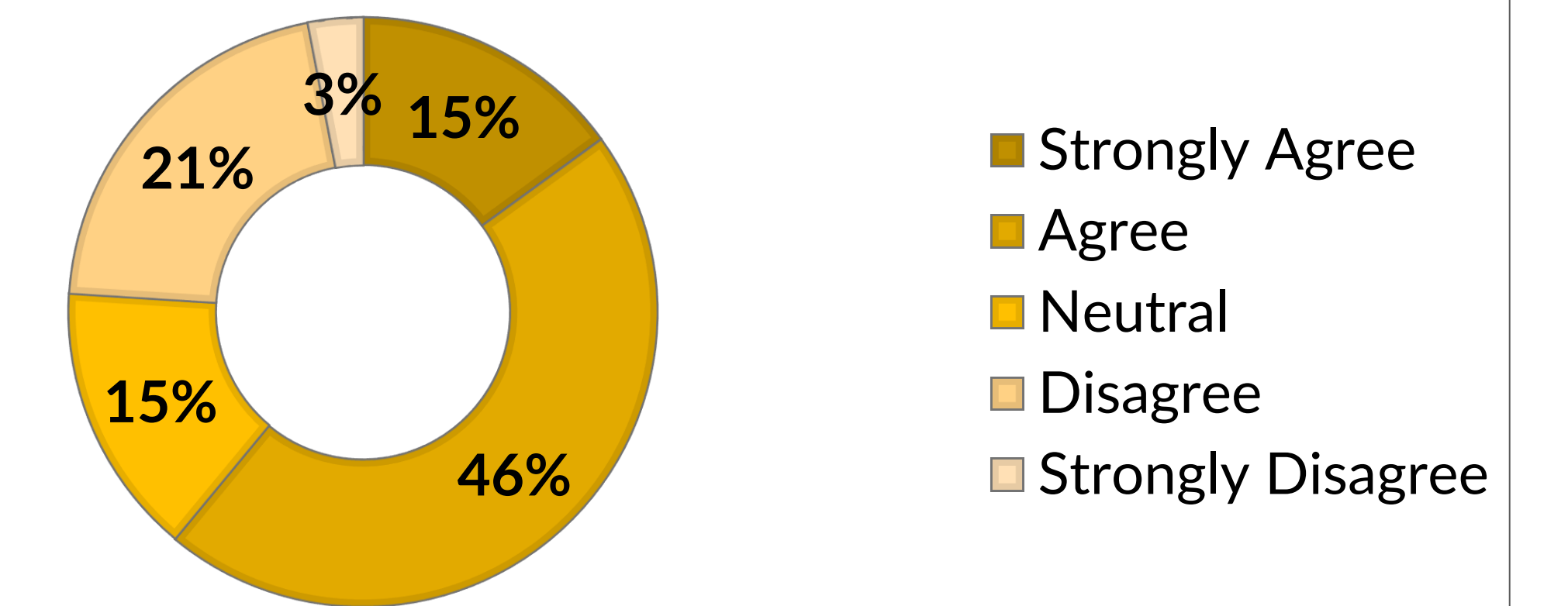
**Participant Characteristics (n=74)**

Primary Care	74%
Ob/Gyn	12%
Psychiatry/Mental Health	3%
Medicaid provider	82%
Practice within a FQHC	42%



## Avatar Experience and Course Feedback

### HELPED PREPARE FOR COMMUNICATION



### Representative Qualitative Feedback

I will be more willing to consider specific treatment for [common menopause symptoms]

I would have liked more practical knowledge application, TIP sheets, and patient education resources

I will pay more attention to my patient's backgrounds and cultural factors

[This series] cleared up so much misinformation.

It is disheartening to always see statistics around health disparities without clear solutions

## Conclusion

- The ECHO Colorado learning approach combined with innovative XR simulations resulted in positive improvements in confidence and skill in providing menopause care among a multidisciplinary group of clinicians.
- Participants increased their ability to recognize the potential impact of race and ethnicity on menopause experience and to incorporate a patient-centered approach to treatment planning.
- Qualitative feedback indicated that participants valued the interdisciplinary learning environment and felt empowered to provide evidence-based treatments within their practice setting.
- Most participants found the Avatar experiences to be easy to use and helpful.
- Improvements increased participant's ease of use though did not result in discernable changes in the self-reported impact of avatar experience.

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