



Dental Patients' Perceptions of Malnutrition Screening Tools' Usability

#1441

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BACKGROUND

- Malnutrition screening (MS) tools are seldom used in dental clinical settings.
- Even with prosthodontic rehabilitation, there is a lack of functionality as natural teeth, leading to malnutrition.
- For successful implementation, it is essential to assess the usability and functionality of these MS tools.

OBJECTIVE

To understand complete denture (CD) patients' perception of the usability of three MS tools using the System Usability Scale (SUS).

METHODS

Study Participants N = 93 CD patients, Study Design = One-time observational study

Evaluate the usability of 3 Malnutrition Screening tools
NSI: 10-item questionnaire, MNA-SF: 6-item questionnaire, MST: 2-item questionnaire

Participants assess usability of each tool using 10-item SUS on a 5-point Likert scale
SUS scores were adjusted to a range of 0 to 100 (higher = greater usability)
A SUS score above 68 is considered acceptable.

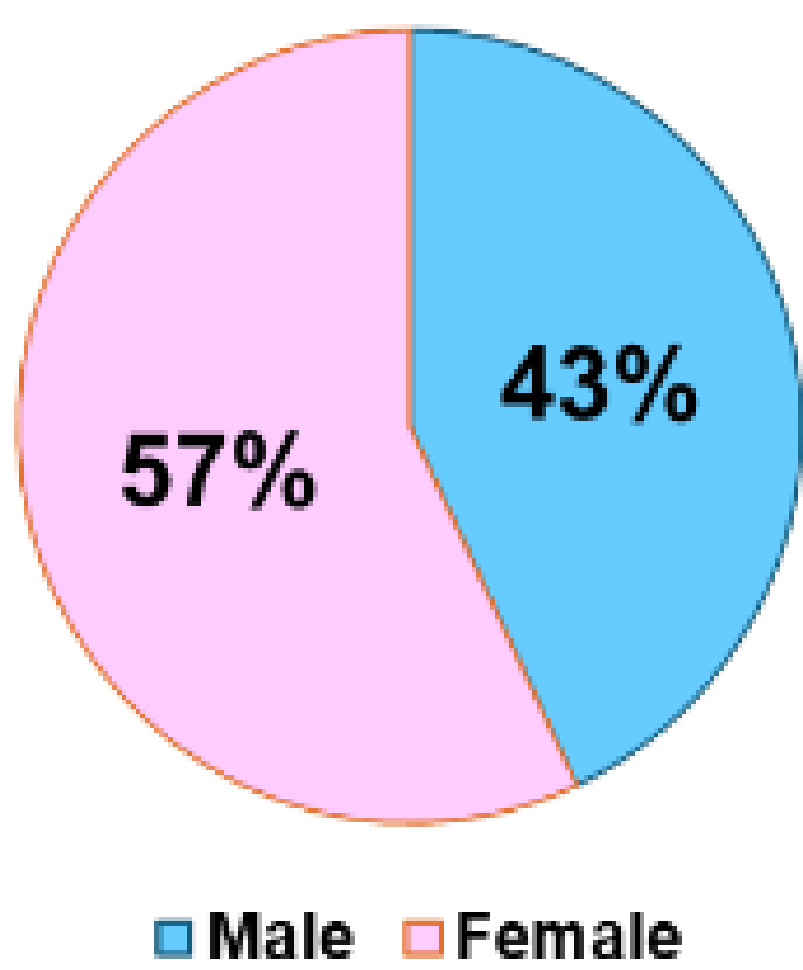
Usability scores are compared by Repeated-measures and ANOVA

NSI: Nutrition screening Initiative, MNA-SF: Mini Nutritional Assessment – Short Form, MST: Malnutrition Screening Tool

RESULTS

Age of study participants
Range = 51 to 95 years
Mean = 71 years

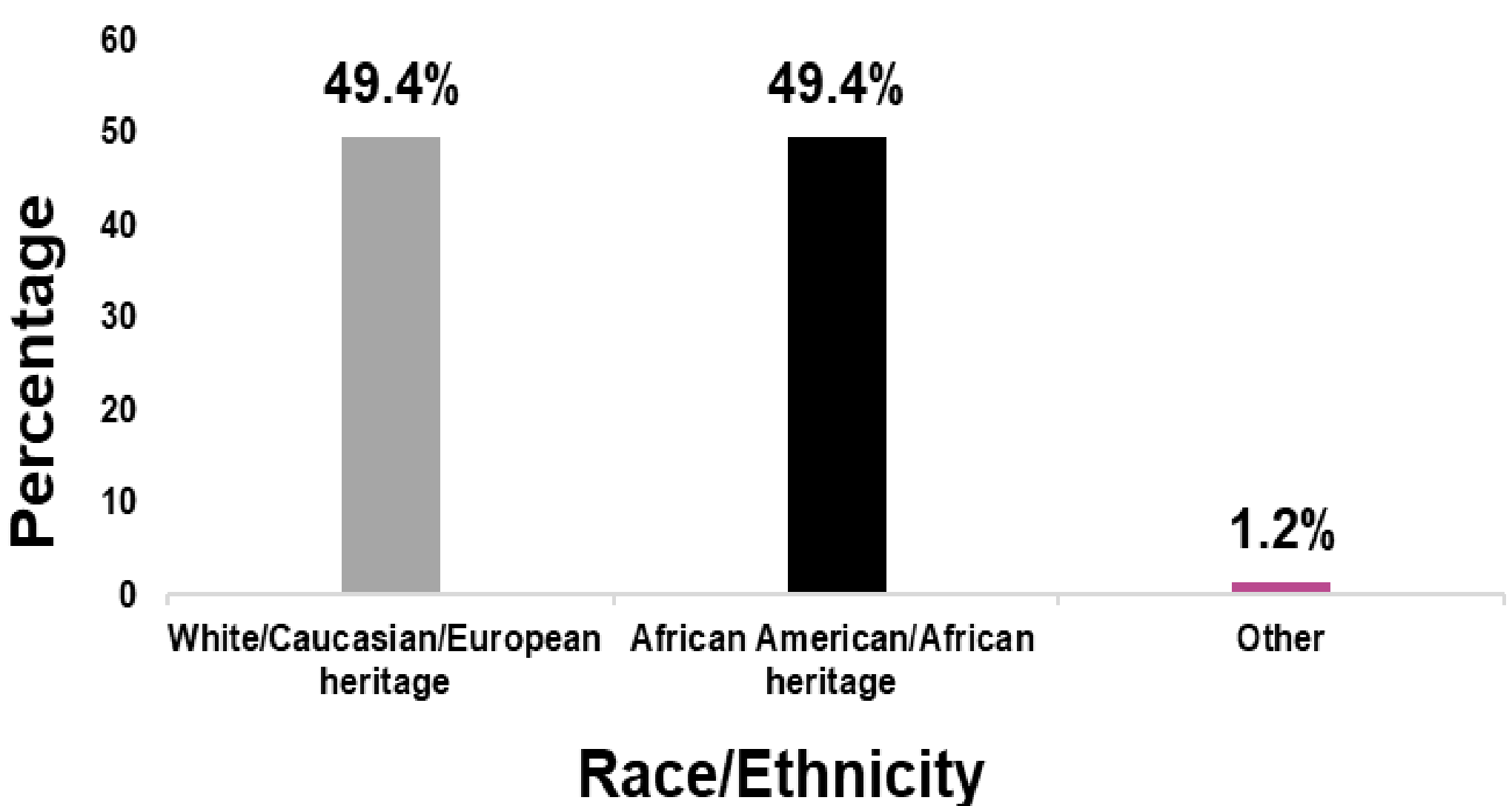
Gender of Study Participants



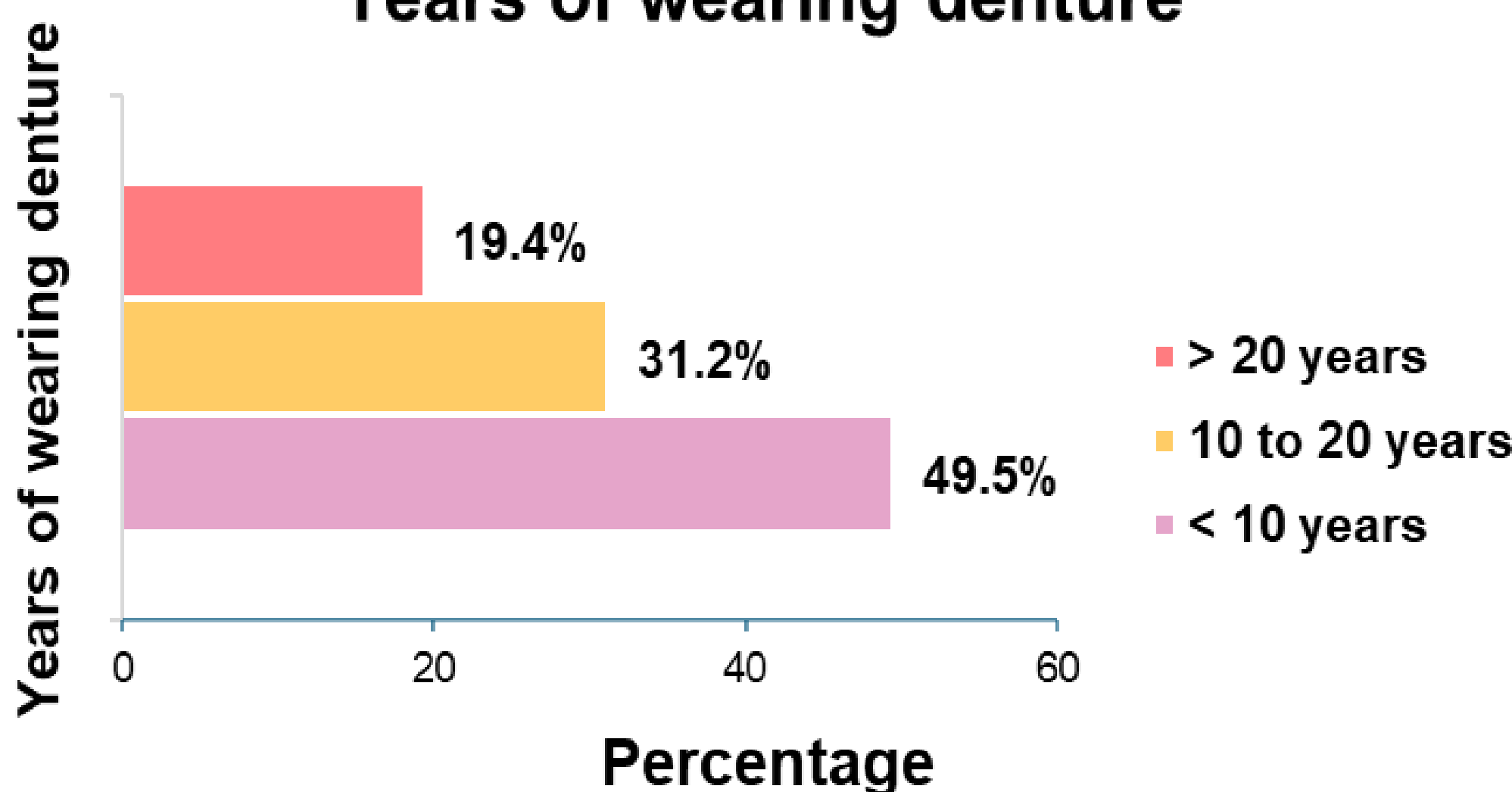
Denture wearers

- Upper - 46%
- Upper and lower - 54%

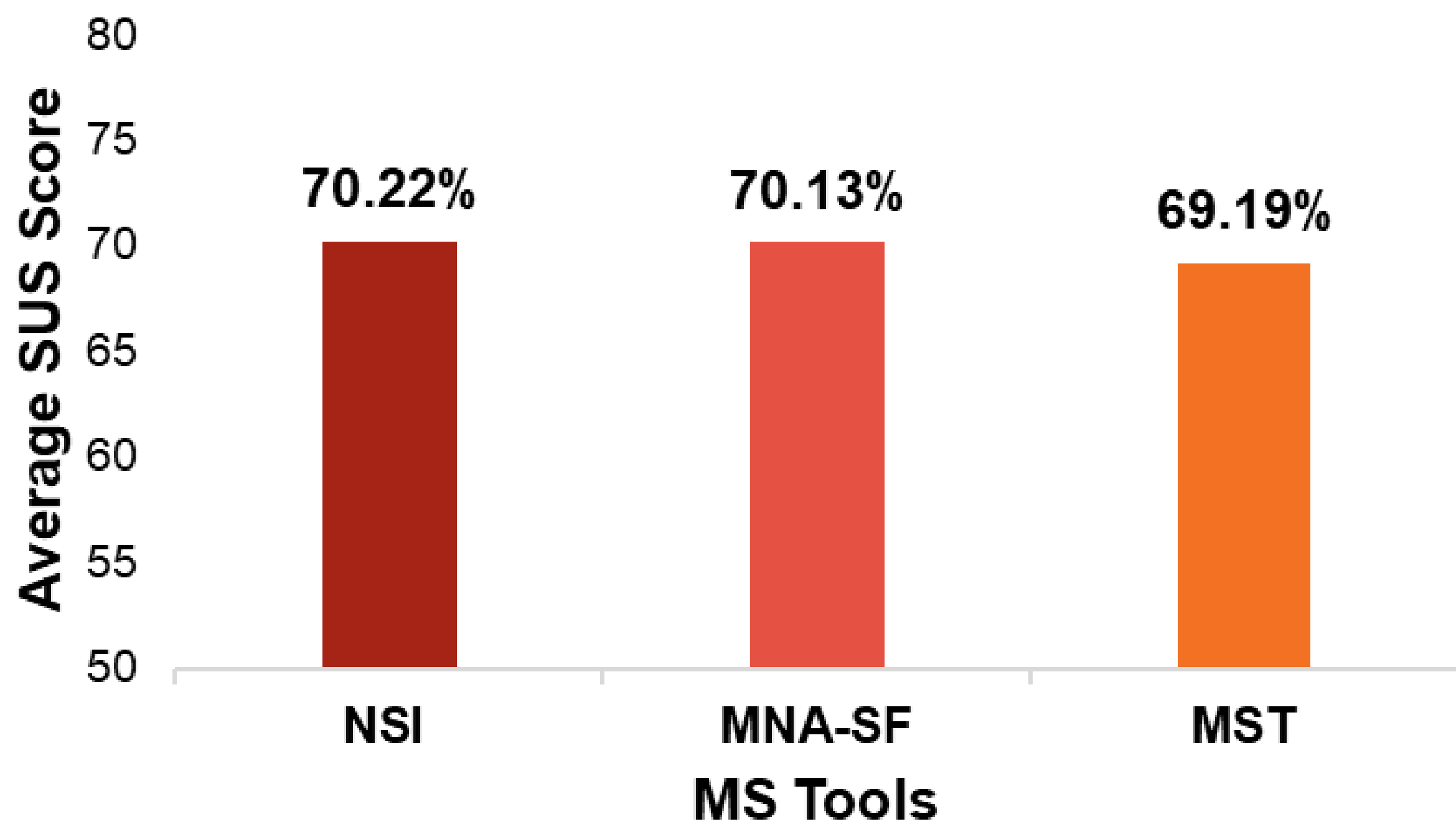
Race of Study Participants



Years of wearing denture



System Usability Scale (SUS) scores of Malnutrition Screening (MS) Tools



Usability Scores: (Mean \pm SD)
NSI: 70.22 \pm 14.1
MNA-SF: 70.13 \pm 15
MST: 69.19 \pm 15.6

No significant difference among the three MS tools
($p > 0.05$; $F = 1.13$; $F_{crit} = 3.04$)

DISCUSSION

- Identifying the usability of three screening tools will help integrate malnutrition screening into the dental clinical workflow.
- Understanding patients' perceptions of the usability of these tools will be valuable for their successful implementation.

CONCLUSION

- Findings suggest that complete denture patients consider the three MS tools acceptable and usable.
- NSI with 10 questions is considered acceptable and not different from 6 or 2-question MS tools, supporting flexibility in tool selection.
- Implementing MS tools within the dental workflow is essential to improving patient care outcomes.

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SCAN QR

- Malnutrition screening tools
- 10 Item SUS questionnaire

