

# Self-perceived versus Actual Oral Health Status among WHICAP Participants



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## BACKGROUND

- Self perceptions of oral health
  - Poorly or incompletely reflect objective indicators of oral health
    - comprehensive objective clinical dental examinations
    - periodontal phenotyping
- Differences between subjective and objective measures of oral health
  - May reflect
    - Complex oral health problems
    - Awareness of oral health conditions
    - Barriers to accessing routine care

## OBJECTIVES

- To identify the prevalence and predictors of oral health quality of life
  - As determined through
    - A validated oral health questionnaire (implemented in NHANES)
    - Comprehensive whole mouth examinations identifying oral health conditions in a cohort of community-based older adults based in local communities to CUIMC
- We explored for relationships with various predictors including periodontal status, as well as age, race-ethnicity, gender, and education.

## METHODS

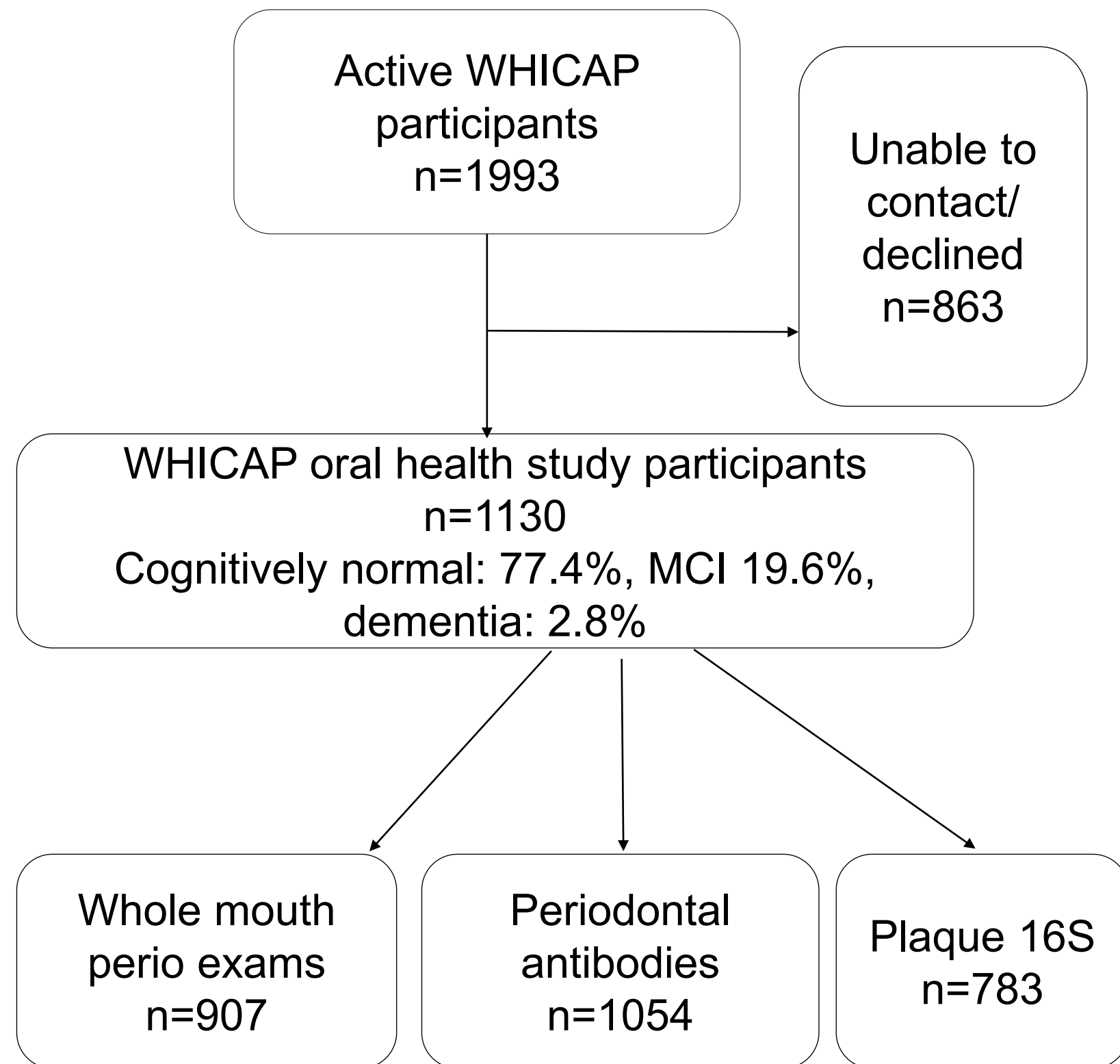
### Washington Heights-Inwood Columbia Aging Project (WHICAP)

- Multi-ethnic longitudinal study of cognitive aging in elderly northern Manhattan residents
- More than 6000 participants followed since 1990
- All aged 65 years and older
- Medical, social, and health behavior histories, general medical exams, and neuropsychological testing



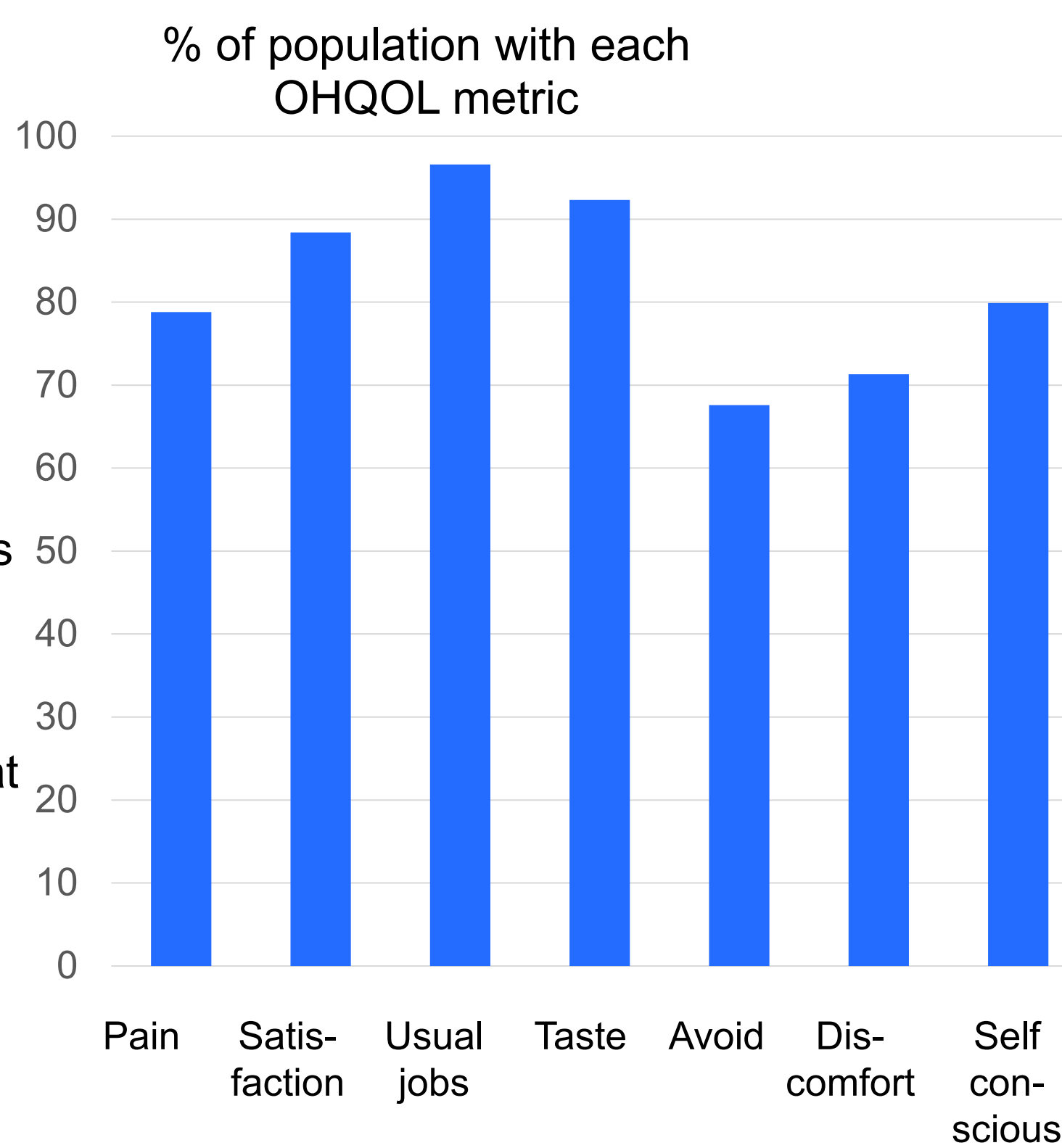
### WHICAP Ancillary Study of Oral Health:

- 1130 WHICAP participants initially evaluated 2013-2016
  - Repeat examinations ongoing (2022-present)
- Comprehensive oral health questionnaire within 6 months of WHICAP assessment
- Full-mouth dental and periodontal examinations
- Additional data:
  - plaque sampling & 16S sequencing
  - Serum antibody levels to common pathogens



### Oral Health Quality of Life

- Poor Oral Health Quality of Life (OHQOL) was determined as
  - Having any  $\geq 2$  of the following
  - Within the past year
    - difficulty doing usual jobs/activities
    - being less satisfied with life due to dental problems
    - painful/aching in mouth
    - sense of taste affected
    - avoiding particular foods
    - being uncomfortable to eat any foods
    - being self-conscious or embarrassed about oral health
- 1124 of 1130 (99.5%) of participants had available data regarding OHQOL and were available for analyses



## RESULTS

Table 1. Sociodemographic and oral health status of the cohort

Age (y), Mean (SD)	75.5 (6.7)
Female, n(%)	748 (66.5)
Years of Education	
>16 years, n (%)	198 (17.7)
12-16	486 (43.5)
Less than 12	432 (38.7)
Race-Ethnicity (n= 1112)	
White, n (%)	262 (23.7)
Hispanic, n (%)	342 (30.9)
Black, n (%)	503 (45.4)
Edentulous, n (%)	165 (14.7)
Periodontal Status (2012 CDC/AAP definition) (n= 861)	
None-Mild, n (%)	193 (22.5)
Moderate-Severe, n (%)	663 (77.5)
Poor OHQOL	373 (33.0)

Table 2. Logistic regression relating periodontal disease and OHQOL

N=841 OR (95%CI)	Univariate	+ Age, (race-ethnicity)	Education & Gender
Perio Status			
Moderate- Severe v. None-mild	0.85 (0.59-1.19)	0.85 (0.60-1.20)	0.85 (0.60-1.21)
Race-Ethnicity			
Black	<b>1.94 (1.34-2.81)</b>	<b>1.92 (1.29-2.85)</b>	<b>1.88 (1.27-2.80)</b>
Hispanic	<b>2.29 (1.62-3.24)</b>	<b>2.26 (1.46-3.49)</b>	<b>2.22 (1.43-3.42)</b>
Gender	1.24 (0.95-1.62)	1.26 (0.96-1.65)	--
Education (n=835)			
12-16 years	1.24 (0.86-1.79)	1.24 (0.86-1.79)	--
<12 years	<b>1.63 (1.13-2.36)</b>	<b>1.45 (1.13-2.41)</b>	--
Age (each y)	1.00 (0.98-1.02)	--	--

In stratified analyses by race-ethnicity, there were no associations between OHQOL and any other predictors for any group.

## CONCLUSIONS

- Low oral health quality of life
  - Was common in this cohort
  - Not associated with periodontal status
  - More likely to occur in historically marginalized populations
- Next steps:
  - Analyses of tooth count to OHQOL
  - Explore periodontal status relative to access to care
- Identifying means to improve routine oral health care remains a common and incompletely addressed public health challenge.

## REFERENCES

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