#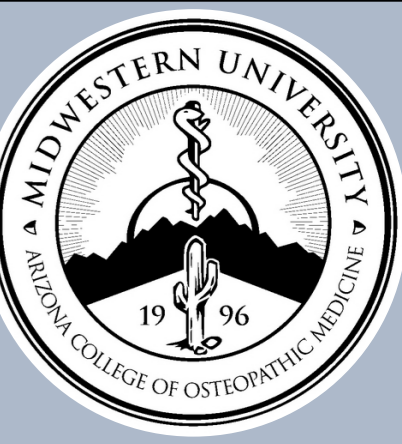 Assessing Knowledge, Perceived Susceptibility, Severity, Benefits, and Barriers, of Colorectal Cancer Screening in Armenia

Evelyn A. Abrami MS, Taron Torosian MS, Nika M. Harutyunyan MD,
Garegin Dallakyan MPH, Hovhannes Hovhannisyan MPH, Roxanne L. Massoumi MD, Armen Aboulian MD, Marine Hovhannisyan MD, MPH, DSc,
Shant Shekherdimian MD, MPH

Keck School of Medicine of USC

Kaiser PERMANENTE.

UCLA Health

Contact ● eabrami98@midwestern.edu

Background

Armenia
- Low-middle income country in the *South Caucasus* region of *Western Asia*

Population: 3 million people

Colorectal Cancer (CRC)
- Third most common cancer in Armenia (incidence 19 per 100,000)
- 8.2% of cancer related mortality and one of the highest CRC related mortality rates in the Eastern Mediterranean region

Despite these facts, Armenia currently lacks an organized screening program for CRC.

Research Inquiry

Given the health benefits of colorectal cancer screening (CRCS), our study sought to assess the knowledge, attitudes, and beliefs about CRCS among patients who visit polyclinics within the capital city of Yerevan, Armenia.

Hypothesis

We hypothesize that significant gaps in knowledge about CRC and CRCS exist in the country.

The purpose of this study was to gain insight into the various factors that would help contribute to implementing a successful and cost-effective CRCS program in Armenia.

Materials and Methods

Quantitative Survey
- Survey questions were translated from English into Armenian and then subsequently reverse translated into English to verify accuracy.

Study Population:
- Men and women 40-64 years of age visiting primary care clinics in Yerevan, Armenia
- A sample size of 384 patients was calculated using a margin error of 5% and confidence level of 95%

Study Location:
- Polyclinics within the twelve districts of the capital (Yerevan)

Study Dates:
- September-October 2018

Inclusion:
- Patients aged 40-64

Exclusion:
- History of CRC
- Living outside of Yerevan
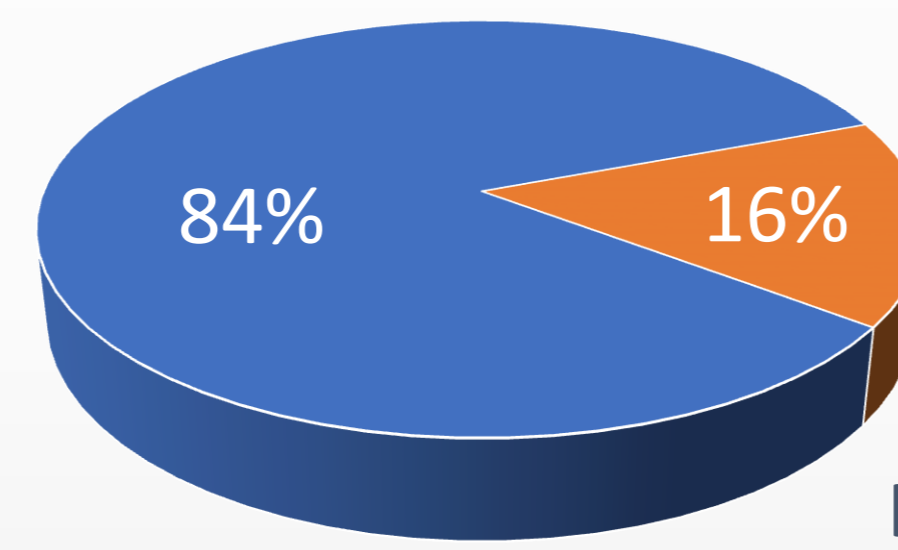
Survey Design:
- Health Belief Model

Analysis:
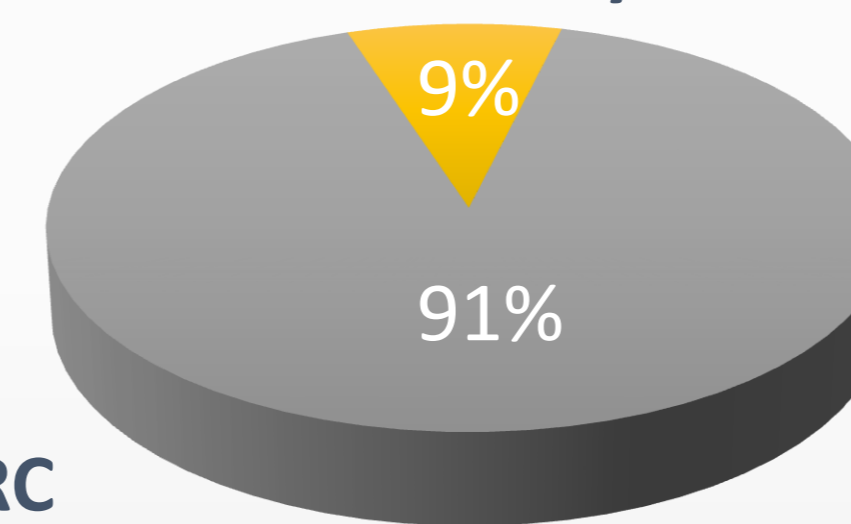- Univariate analysis was performed. A p-value of < 0.05 was considered significant.
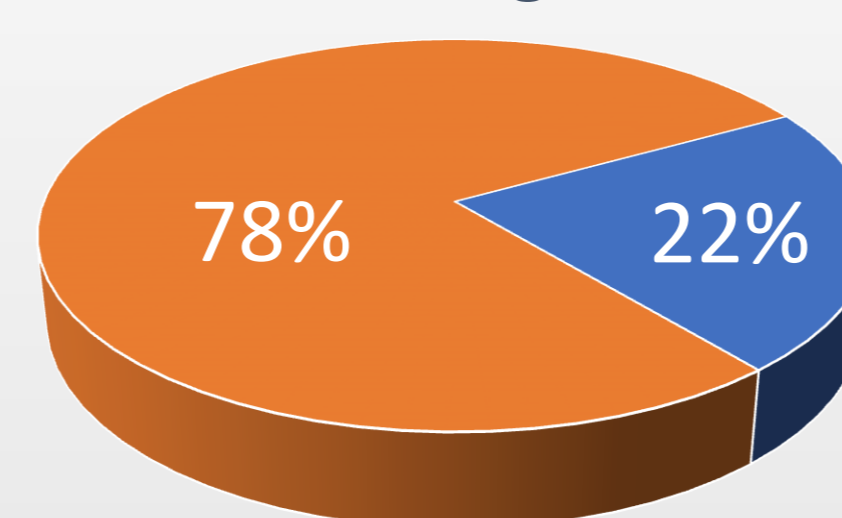
Results

Knowledge of CRC
84% Yes, 16% No

Belief that getting checked regularly increases chances of early detection
9% No, 91% Yes

Knowledge of CRC Screening Test
78% No, 22% Yes

Fear of CRC Screening
Yes [VALUE], No [VALUE], Unsure 81

Screening Compliance Based on Cost
[CATEGORY NAME], <$20, <$8, <$2, Free, 10

Worried about CRC
No 81%, Yes [PERCENTAGE]
[CATEGORY NAME], [CATEGORY NAME]

Provider has discussed CRCS
24 | 342
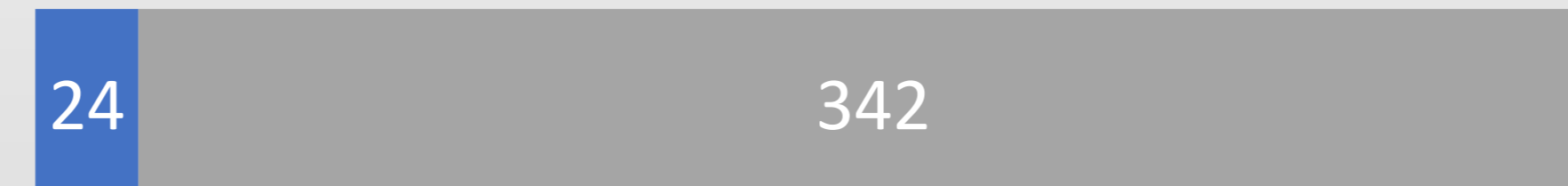
Willing to undergo CRCS if recommended by provider
262 | 85

0% 20% 40% 60% 80% 100%
■ Yes ■ No
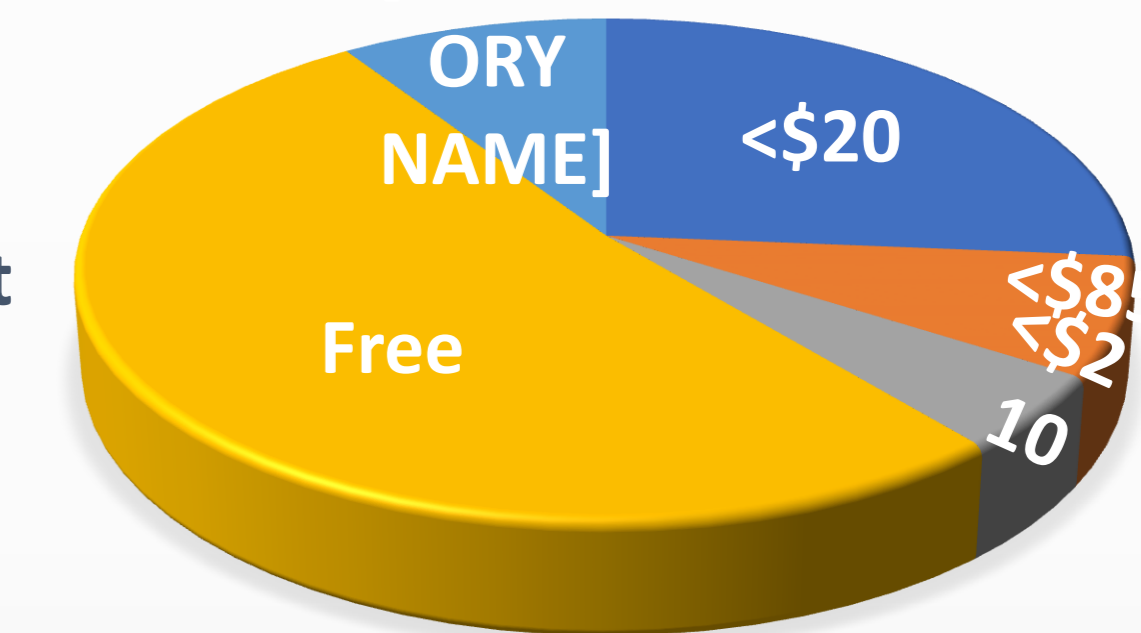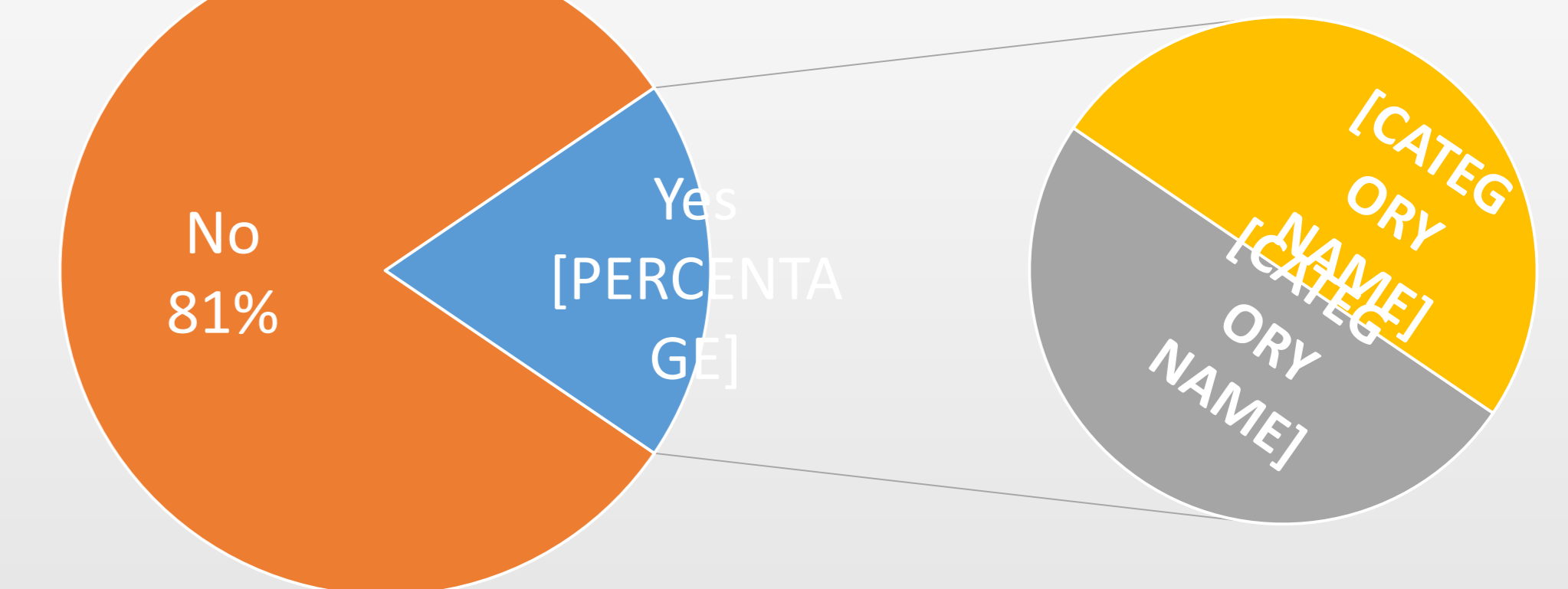
Conclusion & Future Implications

Despite high self-reported familiarity with CRC, **knowledge of CRCS in Armenia remains low** and **significant barriers exist**. These findings suggest that interventions to *increase awareness* of CRC and CRCS, *encouraging providers to discuss CRCS*, and *minimizing out-of-pocket costs* should be considered when implementing CRCS in Armenia.

Acknowledgments