



Understanding the Behavioural Pattern of Self-Management of MetS Among the Urban Slum Population of Delhi Through the Health Belief Model

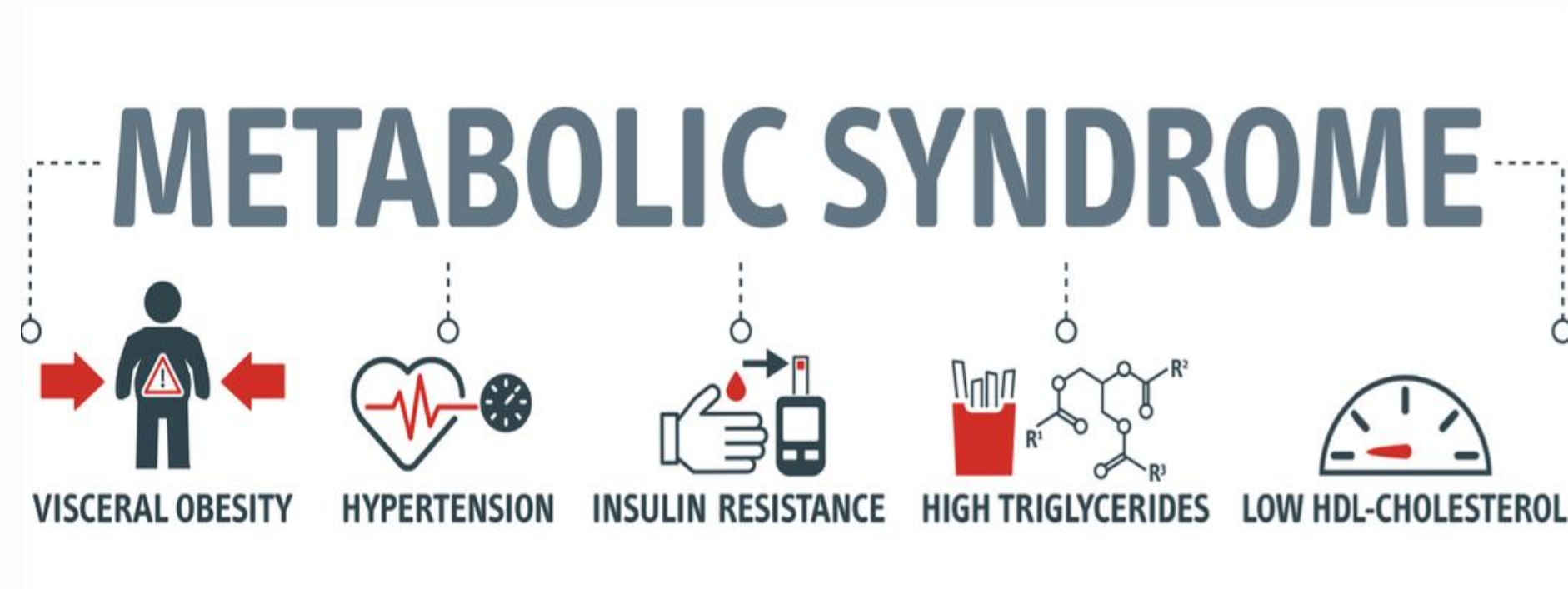
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Under the Supervision of: Dr. Goutam Sadhu



Metabolic Syndrome (MetS):

Metabolic syndrome is a group of five conditions that can lead to heart disease, diabetes, stroke and other health problems. It is also called Insulin Resistance Syndrome.

It is diagnosed when someone has three or more of the following risk factors:



- Global Prevalence: Varies by region, 20% in Asia, 37% in the US
- Indian Scenario: Higher in urban areas, up to 40% in Northern India



Research Aim and Objectives



Aim

Understanding the Behavioural Pattern on Self-Management of MetS in Delhi's Urban Slums using the Health Belief Model



Objectives

1. Identify interaction between behavioural determinants and environmental factors.
2. Understand influence on self-management practices

Health Belief Model (HBM):

HBM is a psychological model developed to explain and predict health-related behaviours, particularly regarding the uptake of health services. It was developed in the 1950s by social psychologists Hochbaum, Rosenstock, and Kegels working in the U.S. Public Health Service.



METHODOLOGY



STUDY DESIGN

Hybrid design engaging 120 adults with MetS, Cross-sectional study with a mixed-method approach (quantitative and qualitative).



Data Collection

- Sociodemographic characteristics
- Health and clinical records
- Qualitative data from interviews based on HBM
- Data Analysis: Quantitative and qualitative methods

METHODOLOGY



STUDY AREA

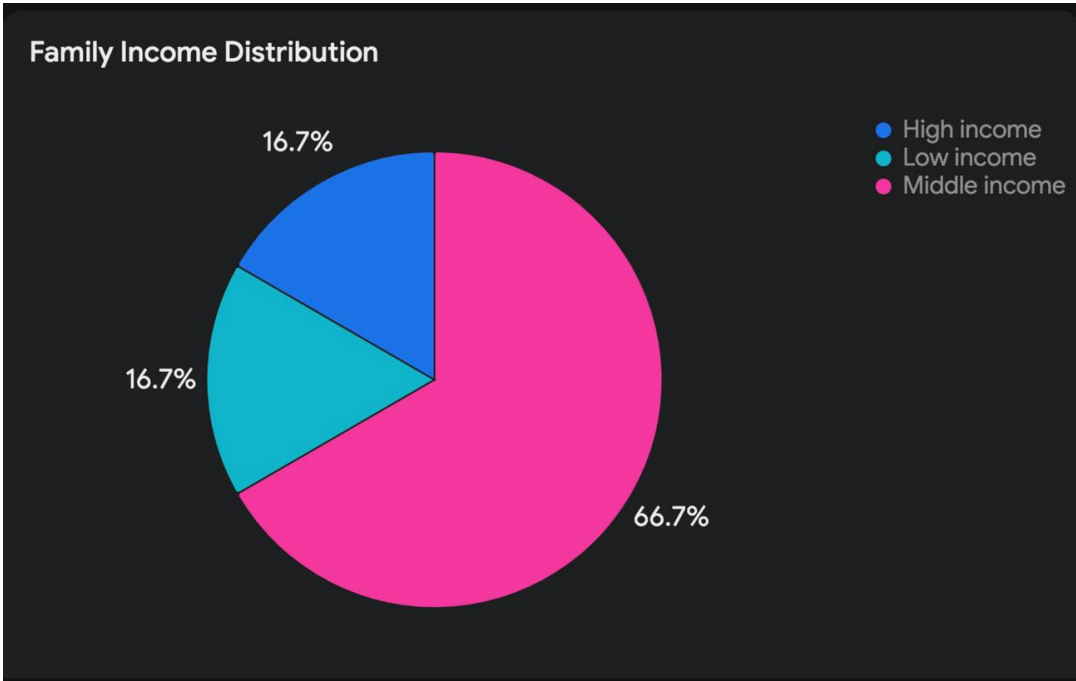
Urban slums in North, South, East, and West Delhi.



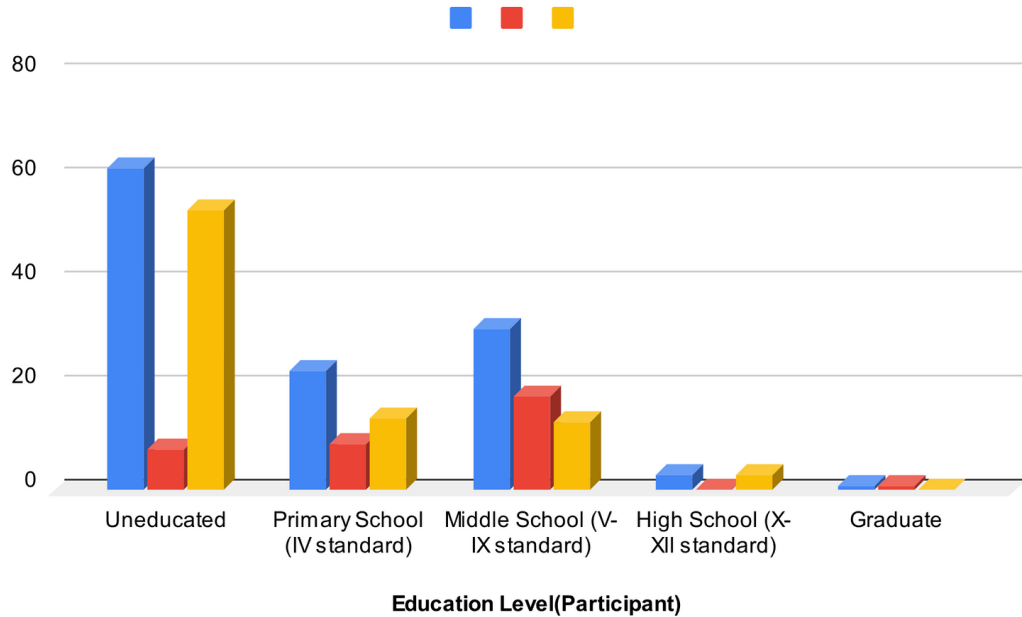
INCLUSION AND EXCLUSION CRITERIA

- Inclusion Criteria:
- Adults aged 18+, with MetS, providing informed consent, having an Android phone.
- Exclusion Criteria:
- Age <18, terminal illness, impaired cognition, type 1 diabetes, pregnancy, involvement in other clinical trials.

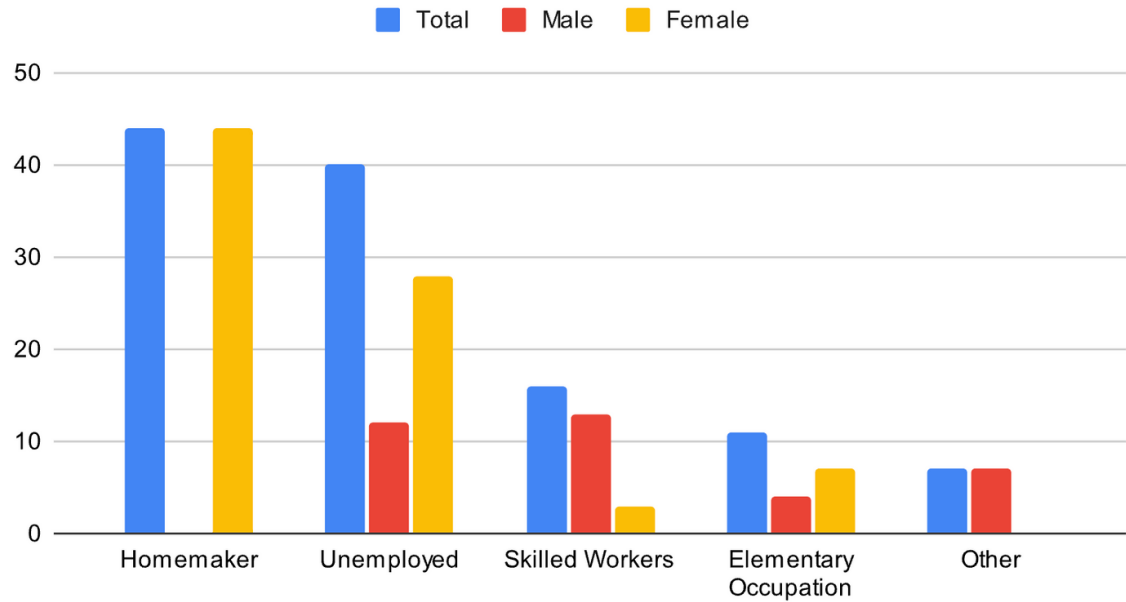
Results - Sociodemographic Profile



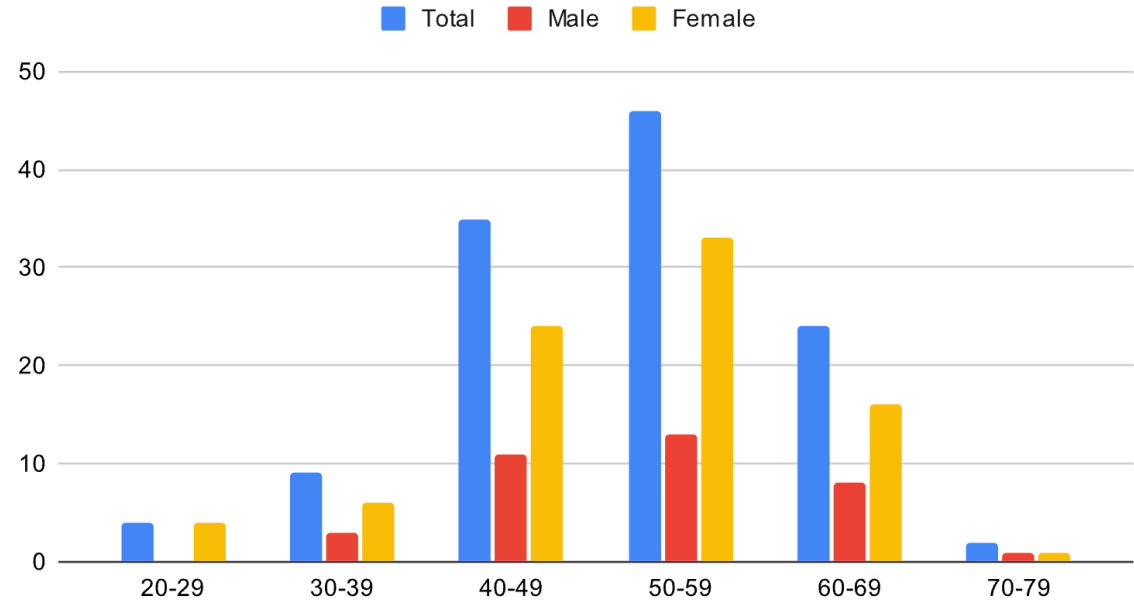
Average Blood Pressure (mm of Hg)	
Male, n (%)	Female, n (%)
147/74 (n=35)	146/76 (n=84)



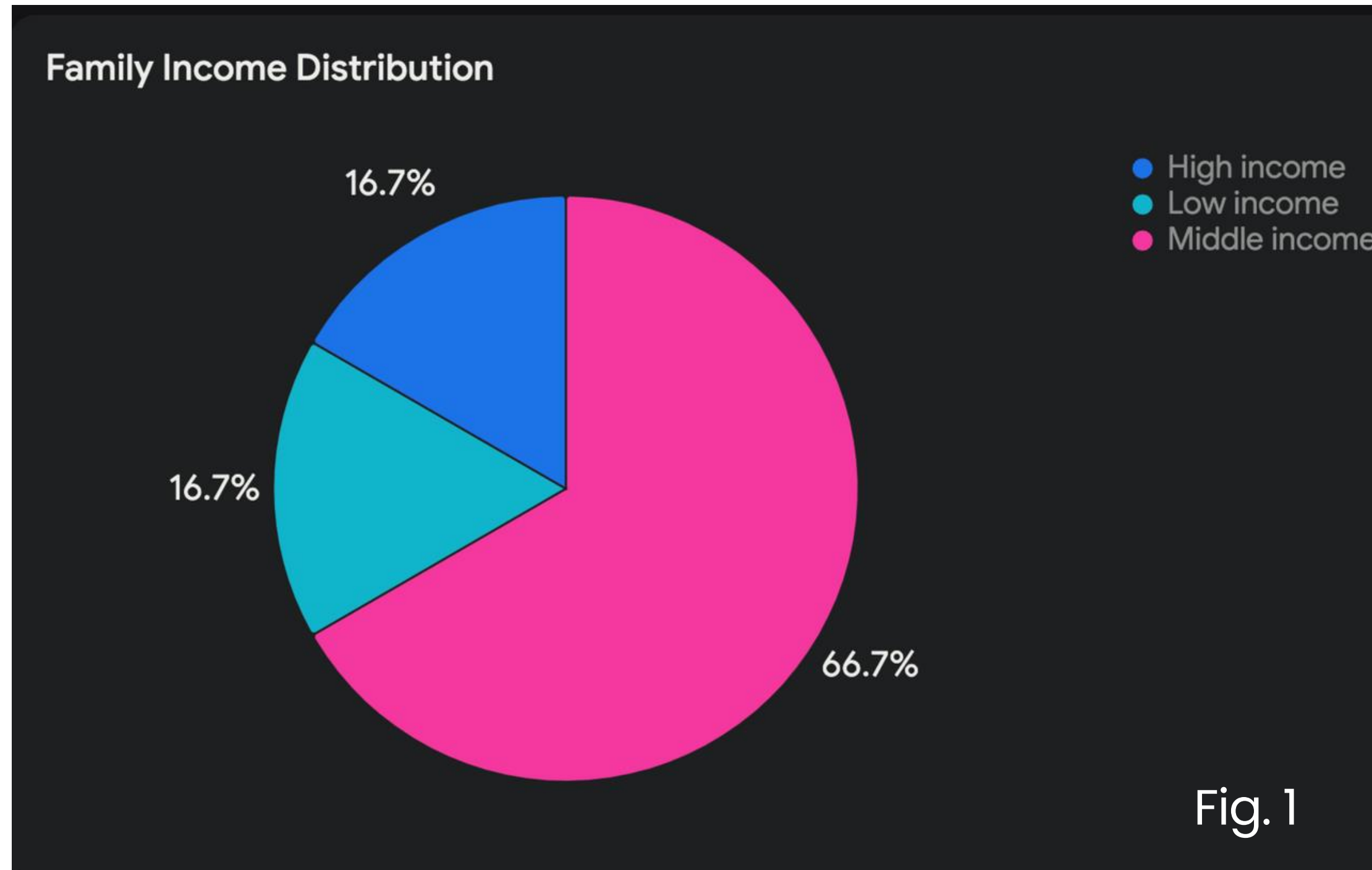
Employment Status (Participant)



Age(in years)



Results - Sociodemographic Profile



Results - Sociodemographic Profile

Average Blood Pressure (mm of Hg)	
Male, n (%)	Female, n (%)
147/74 (n=35)	146/76 (n=84)

Fig. 2

Results - Sociodemographic Profile

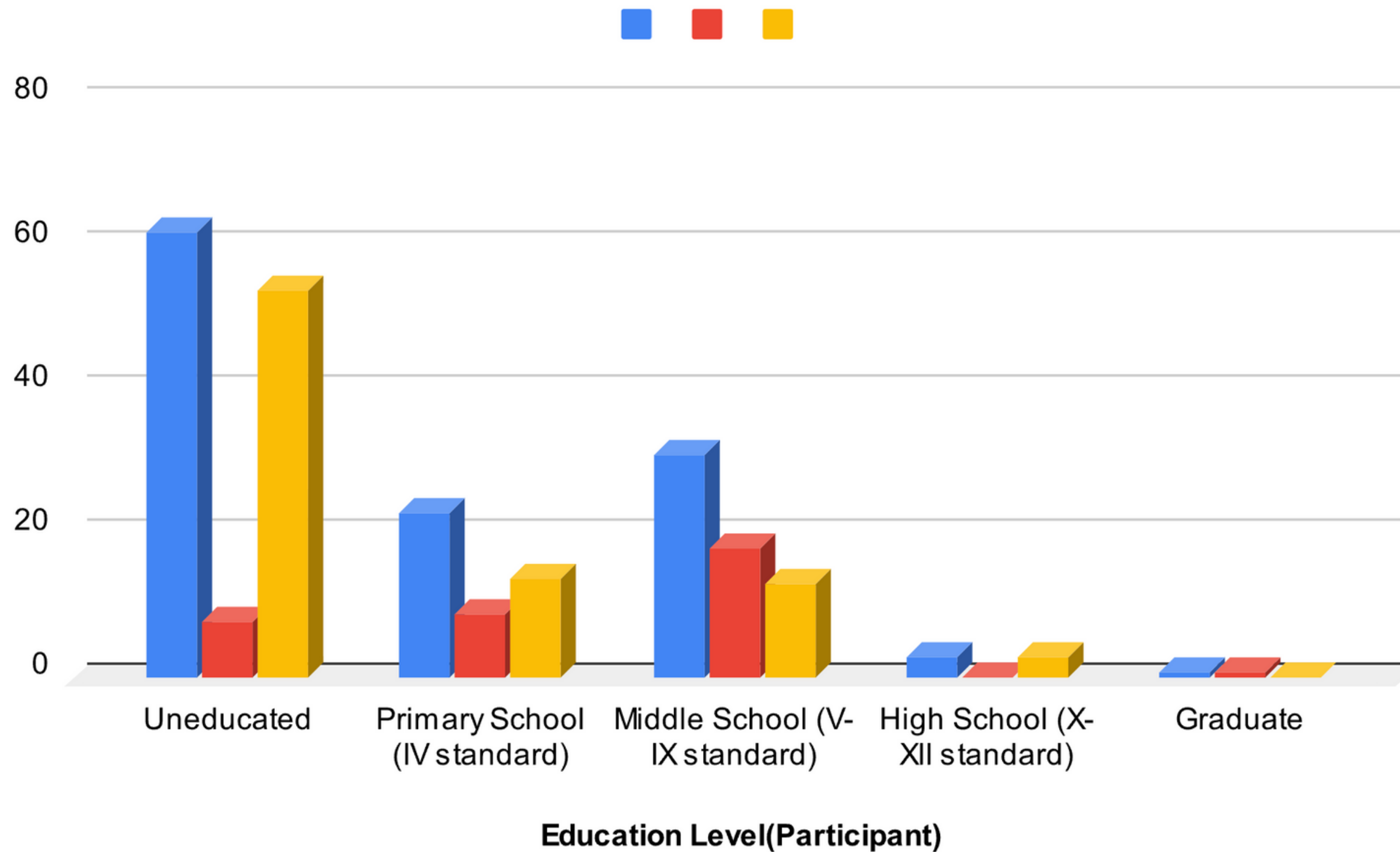


Fig. 3

Results - Sociodemographic Profile

Employment Status (Participant)

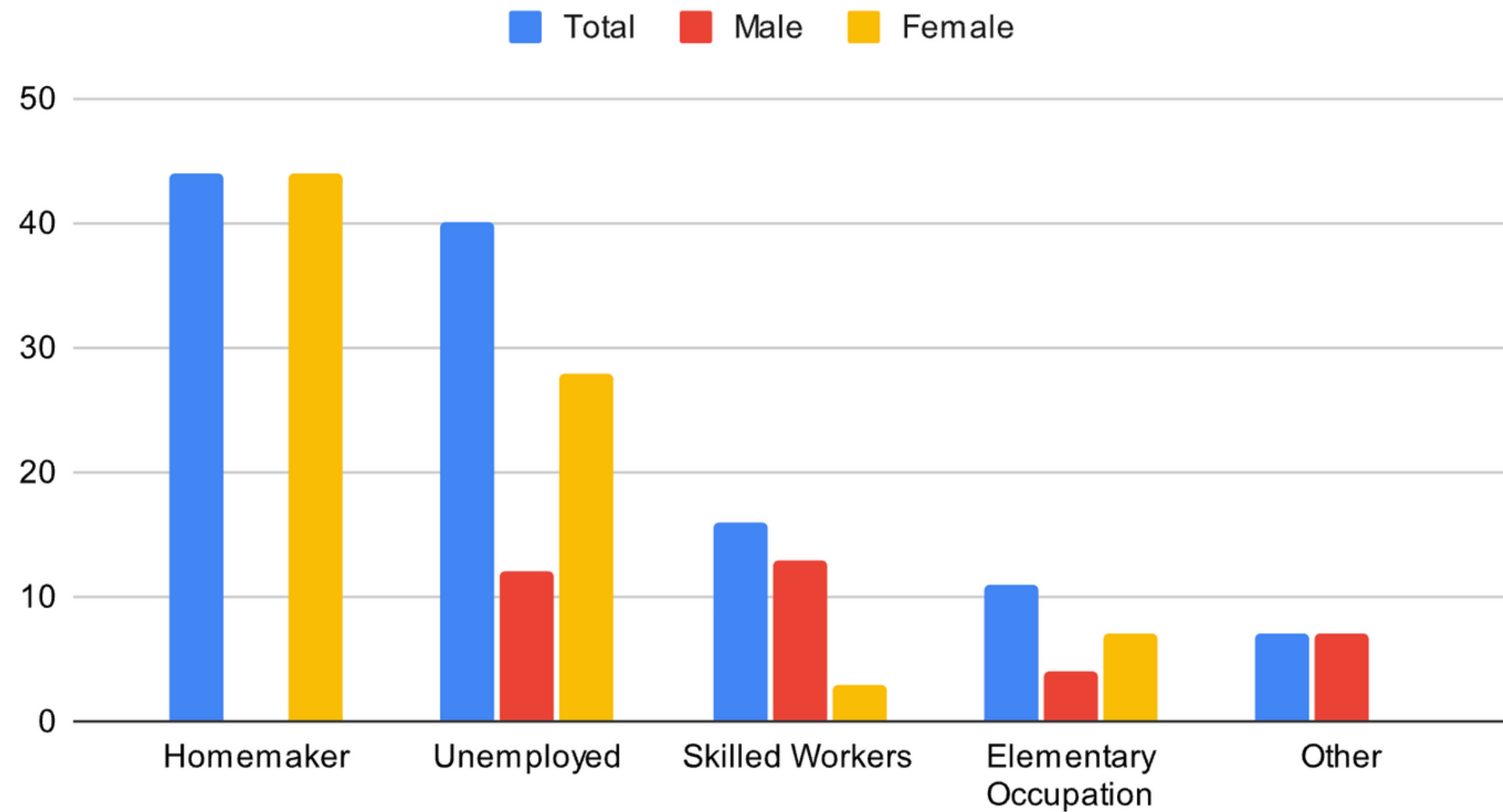


Fig. 4

Results - Sociodemographic Profile

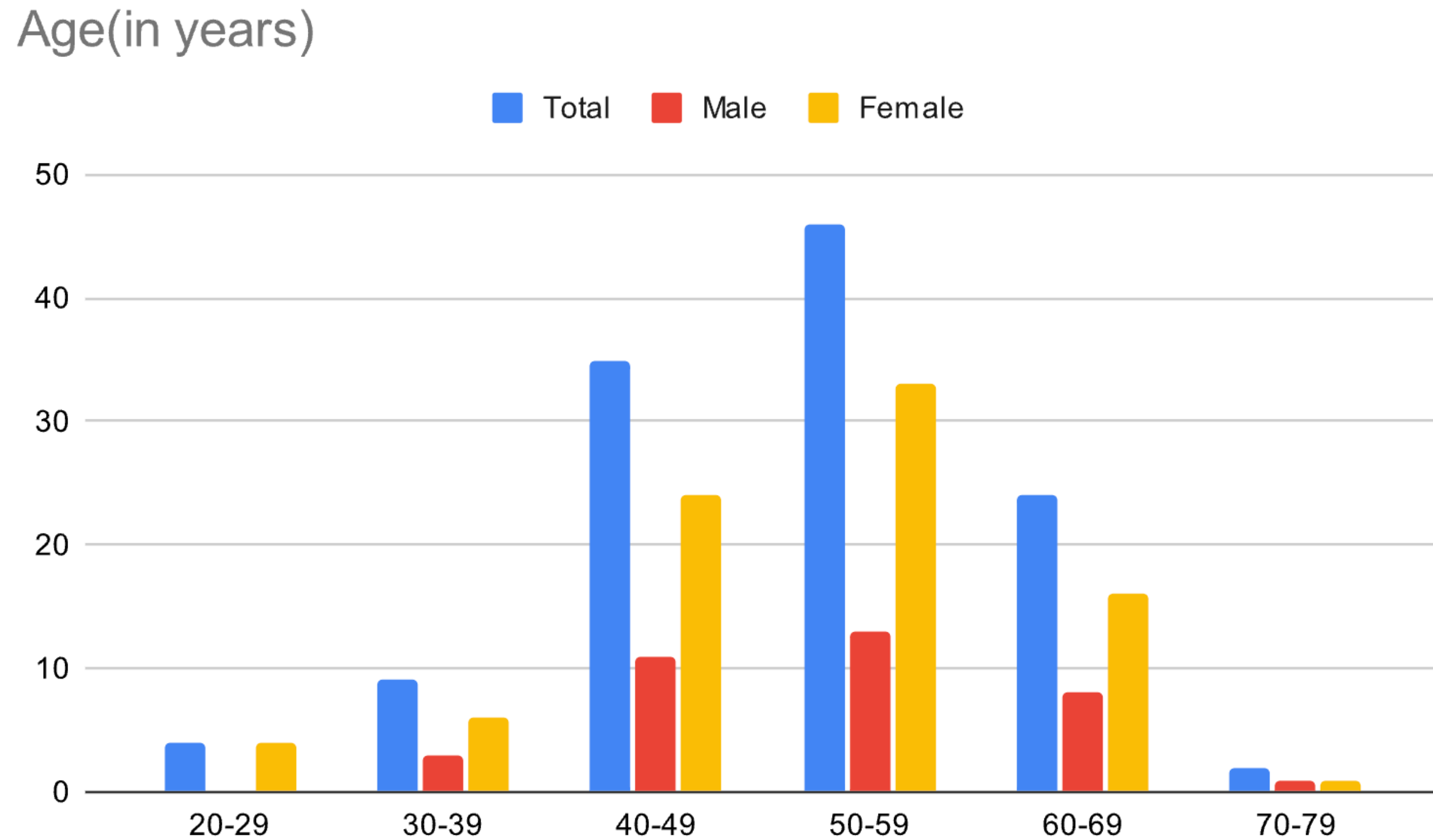
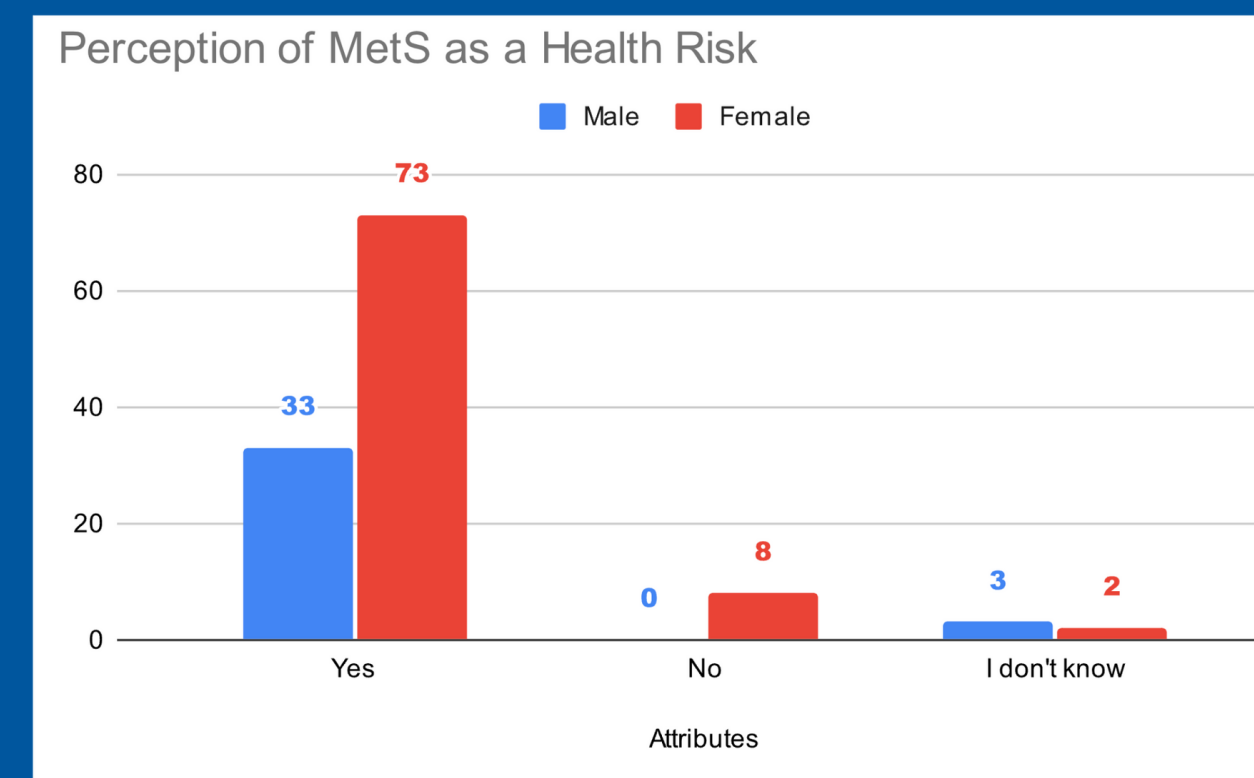
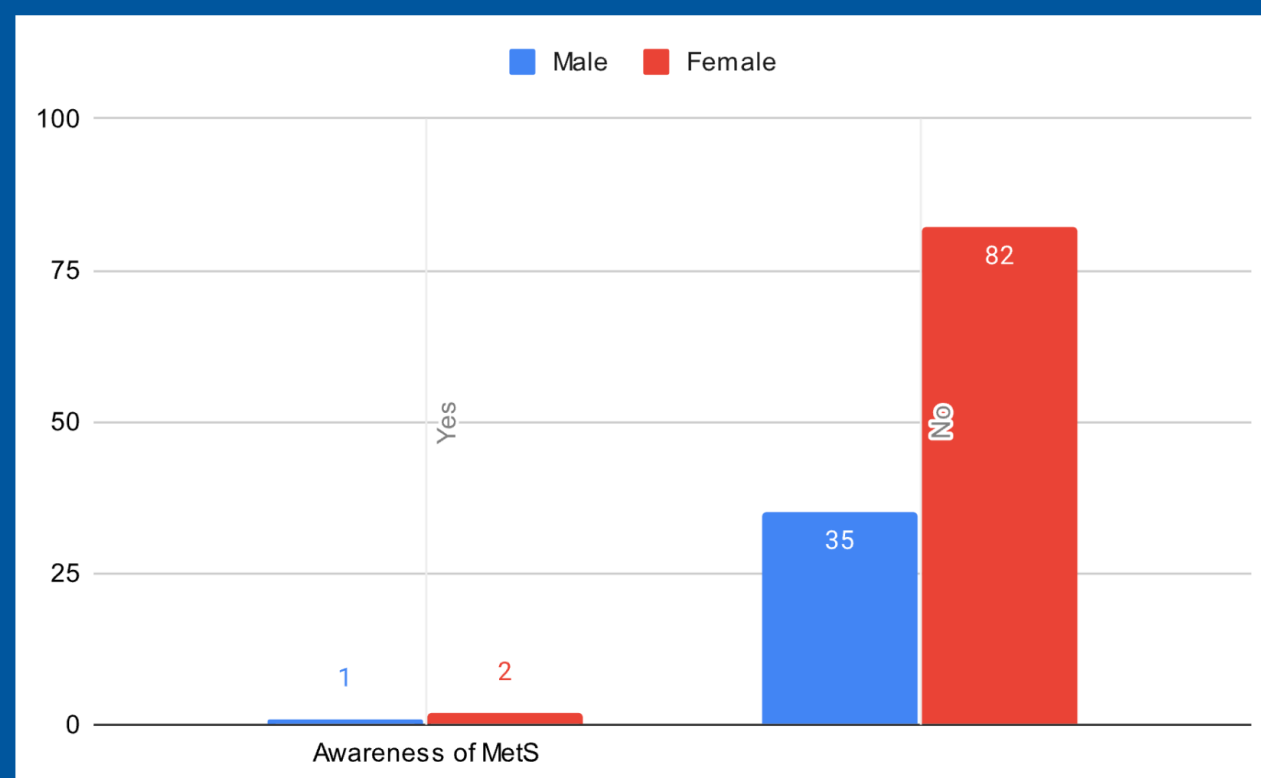
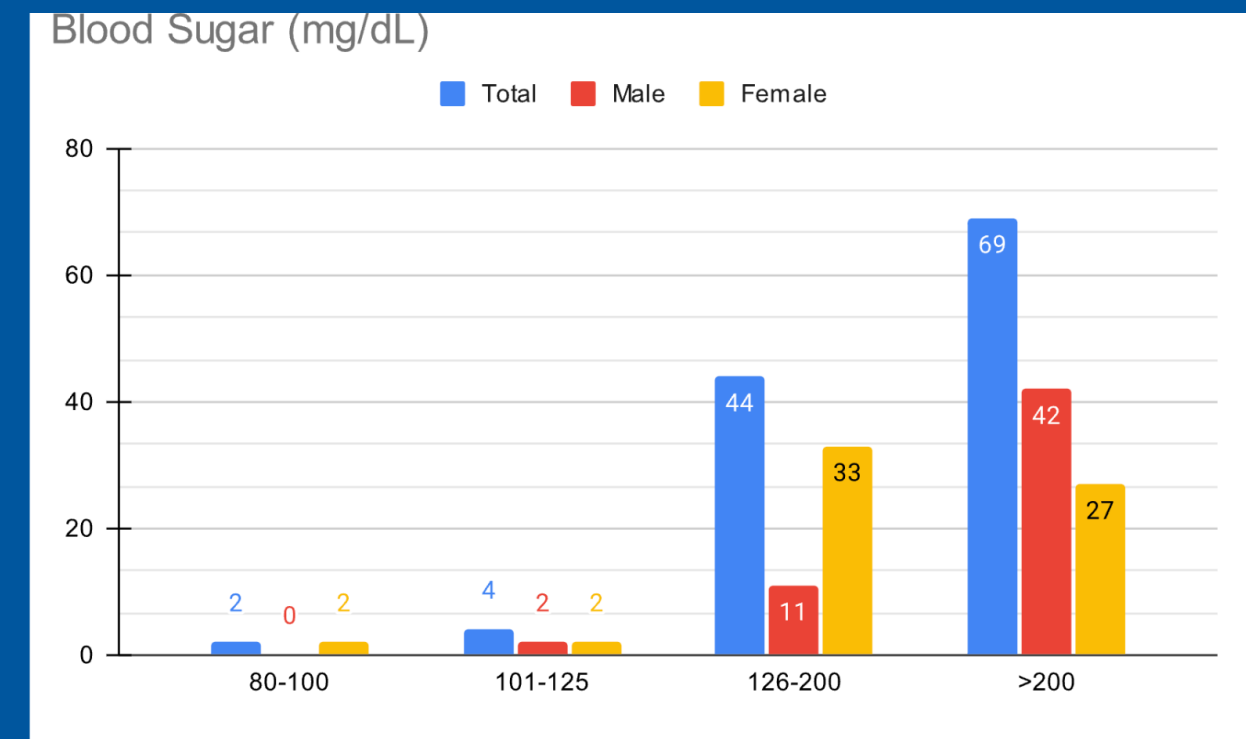
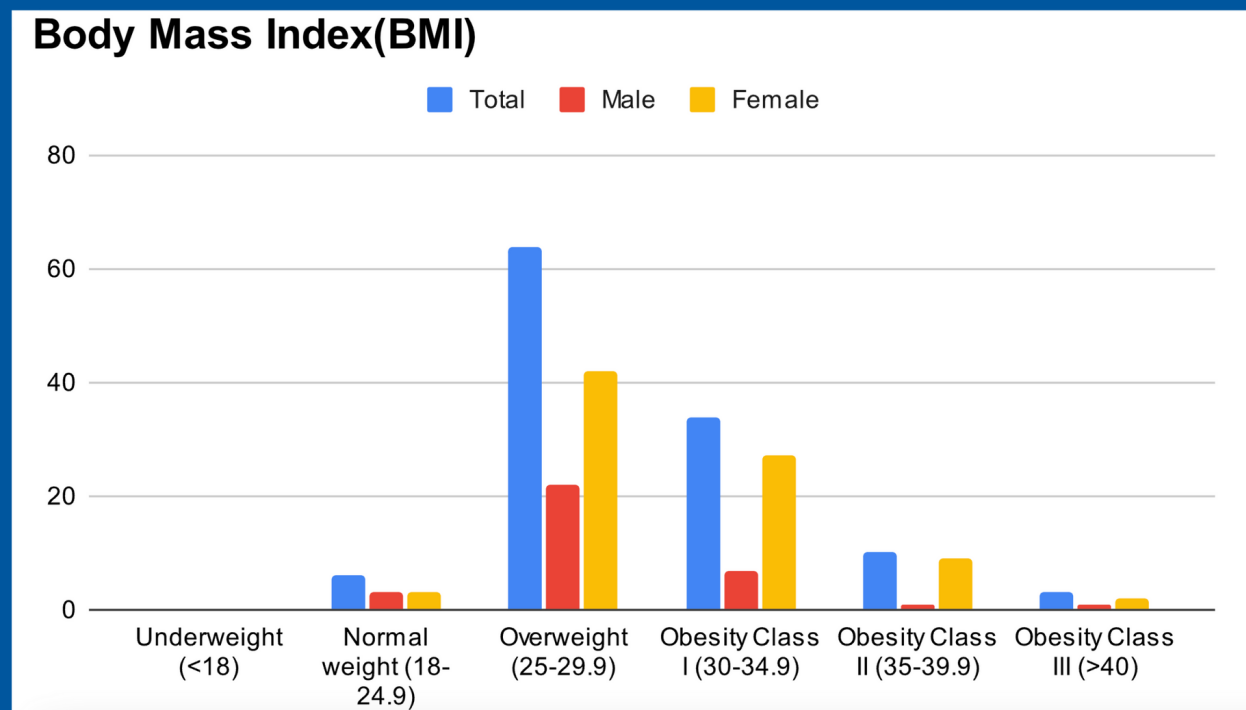


Fig. 5

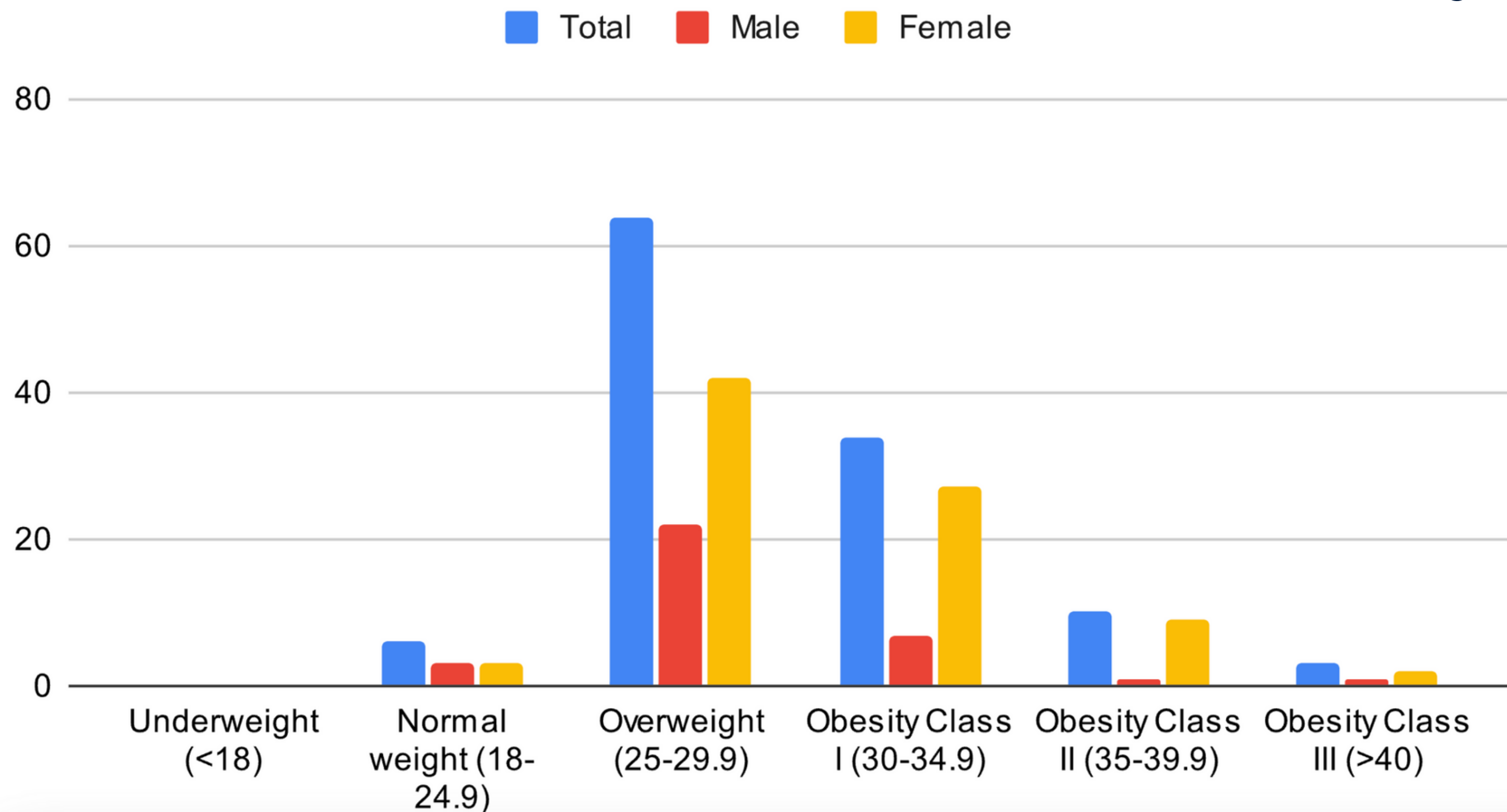
Results - Clinical Assessment and KAP



Results - Clinical Assessment and KAP

Body Mass Index(BMI)

Fig. 6



Results - Clinical Assessment and KAP

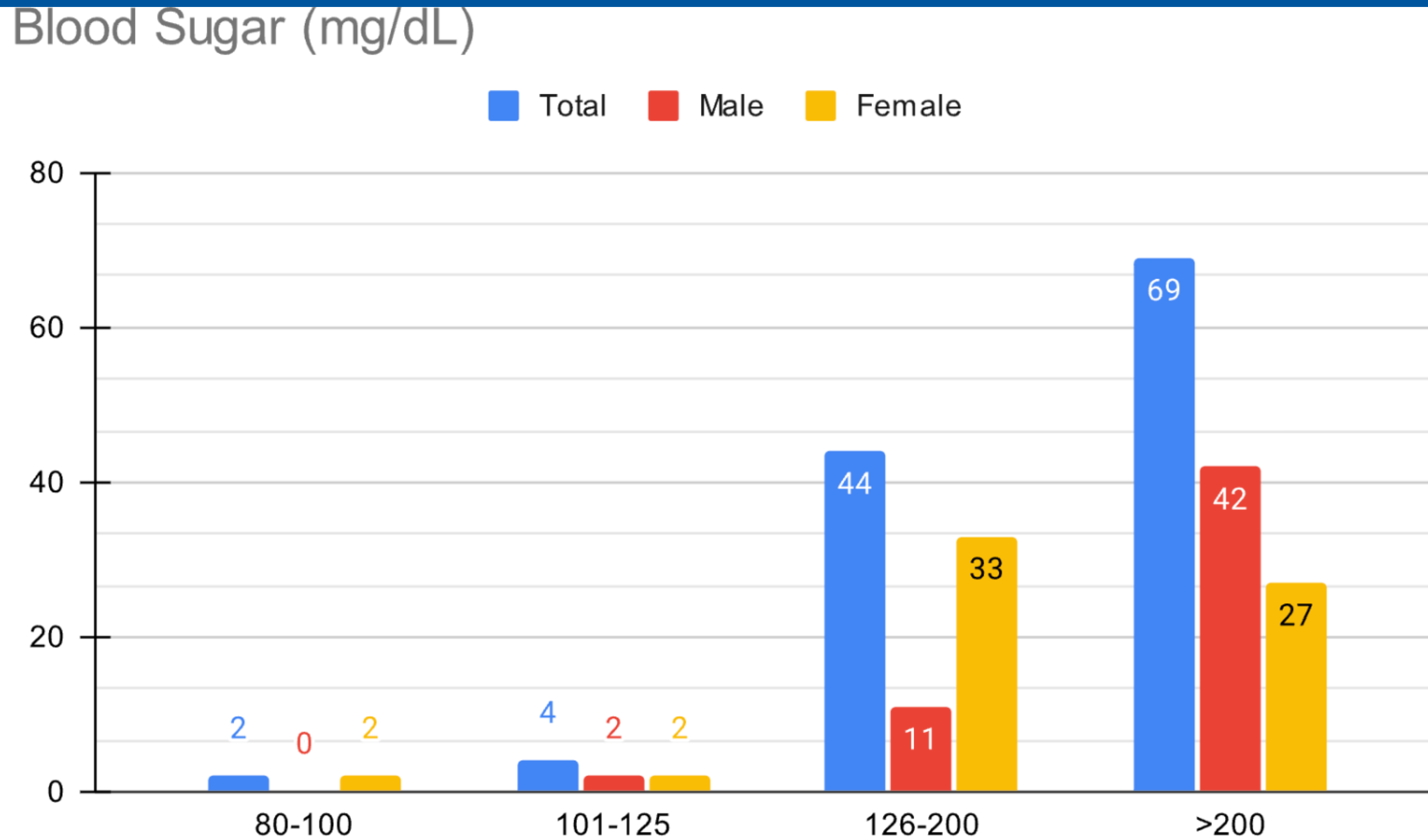
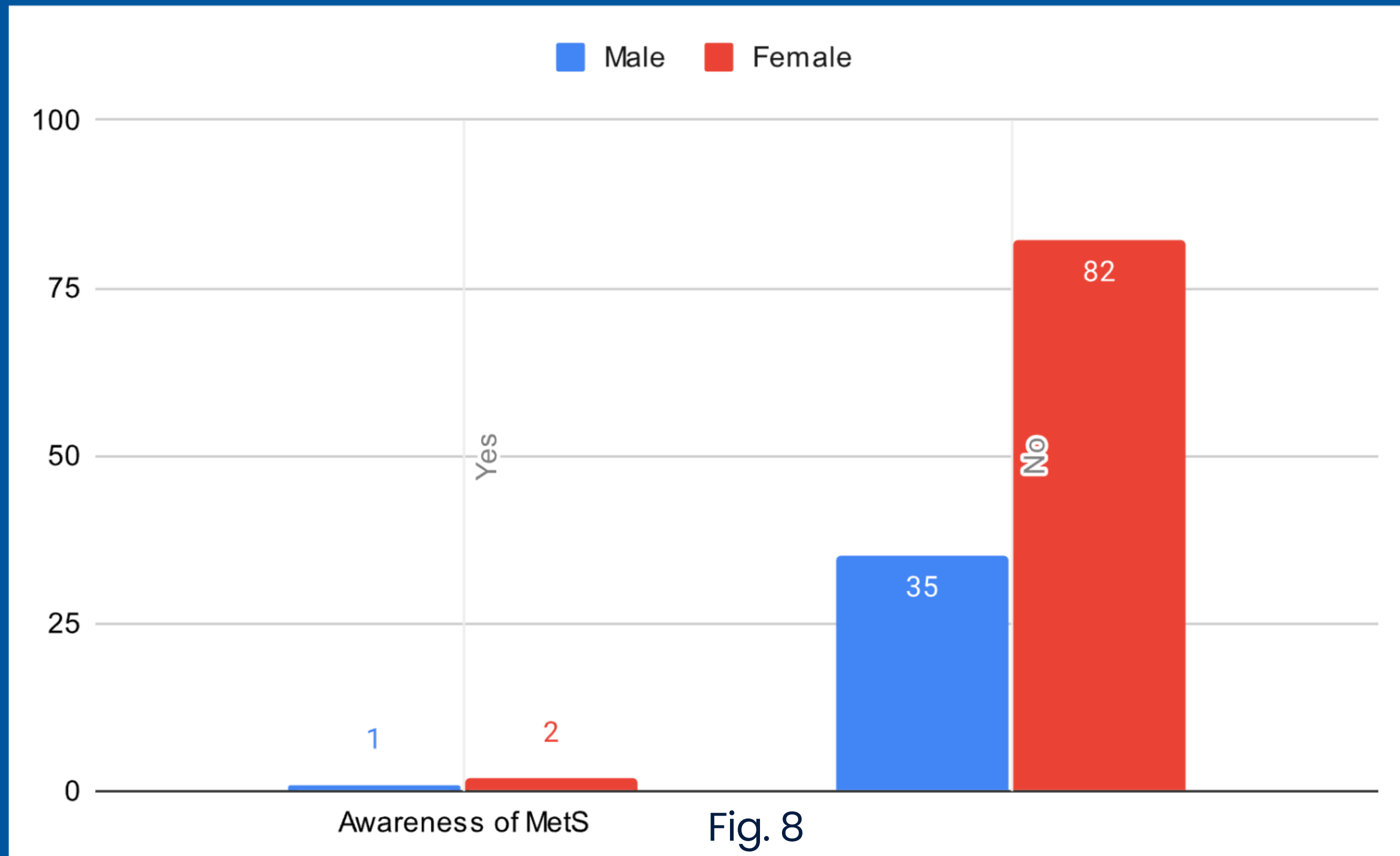


Fig. 7



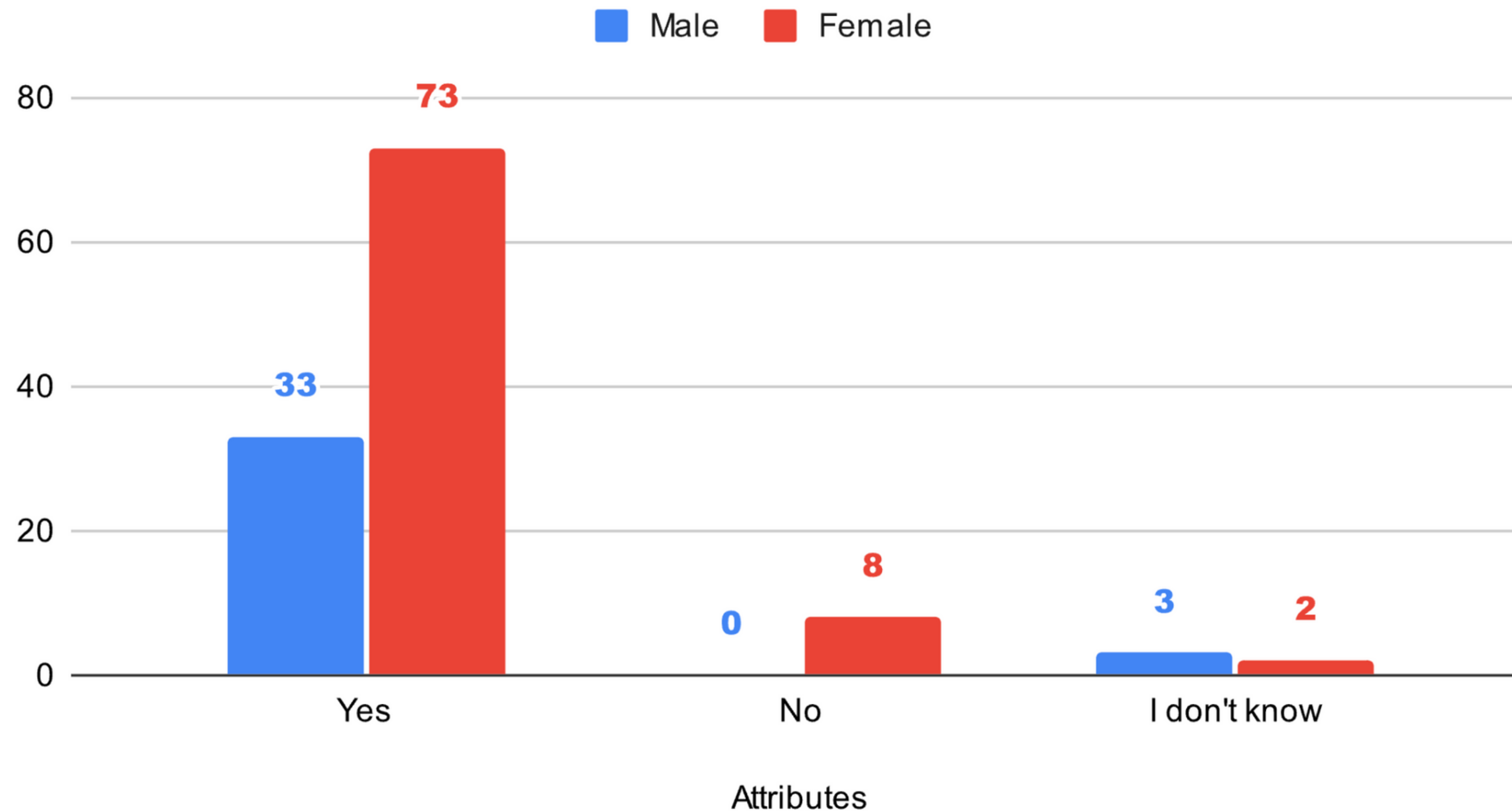
Results - Clinical Assessment and KAP



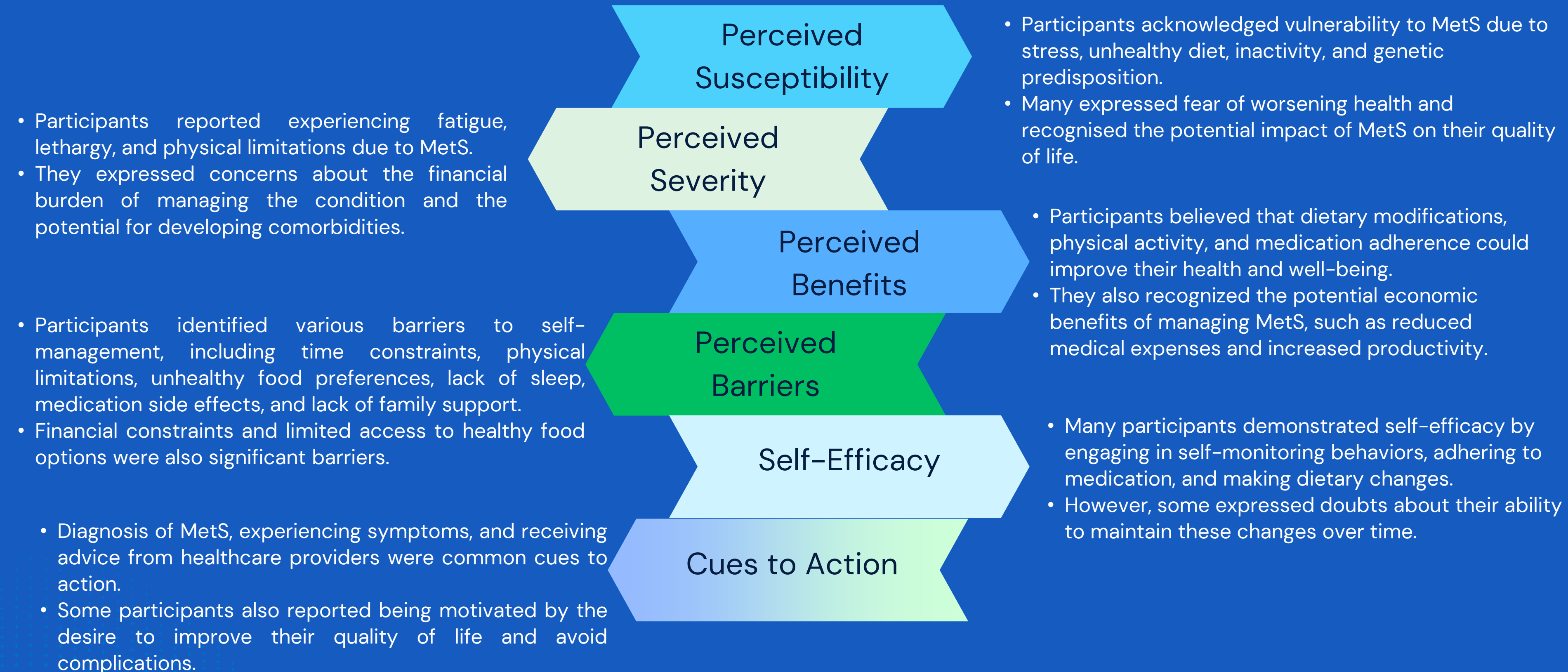
Results - Clinical Assessment and KAP

Perception of MetS as a Health Risk

Fig. 9



Health Belief Model (HBM) - Understanding MetS Self-Management



Discussion

Socioeconomic and Cultural Influences:

- Limited education and low income hinder access to healthcare and healthy food options.
- Cultural norms and beliefs can influence dietary choices and physical activity levels.
- Family environment and social support play a crucial role in self-management behaviours.



Discussion

Knowledge, Attitudes, and Practices (KAP) Towards MetS:

- Low awareness of MetS and its risk factors.
- Misconceptions about causes and treatment options.
- Limited adherence to healthy lifestyle recommendations.

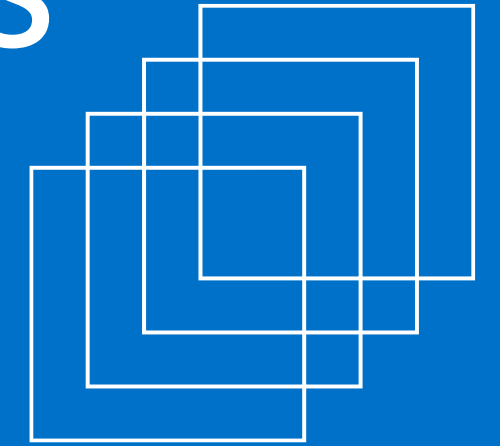


Role of Technology:

1. High mobile phone usage presents an opportunity for mHealth interventions.
2. Potential to deliver health education, reminders, and support through SMS and video messages.
3. Can improve medication adherence and promote healthy behaviours.



Conclusion and Recommendations



Conclusion:

Conclusion 1

This study reveals the significant impact of sociocultural and behavioural factors on self-management practices among individuals with Metabolic Syndrome (MetS) residing in urban slums of Delhi.

Conclusion 2

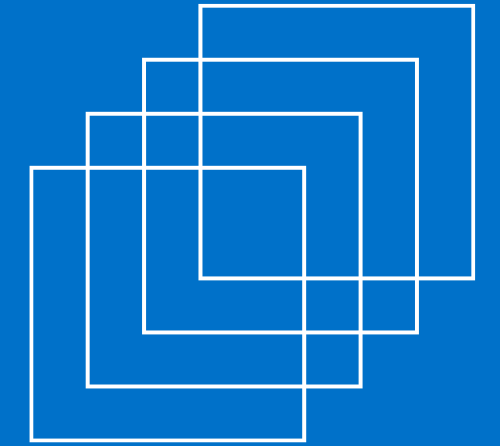
Limited health literacy, unhealthy lifestyle choices, and barriers to accessing healthcare contribute to poor MetS management.

Conclusion 3

Limited health literacy, unhealthy lifestyle choices, and barriers to accessing healthcare contribute to poor MetS management.

Conclusion and Recommendations

Recommendations:



Recommendations 1

Targeted Interventions: Develop and implement culturally tailored interventions that address the specific needs and challenges faced by this population.

Recommendations 2

Culturally Competent Treatments: Design healthcare programs that respect and incorporate the cultural beliefs and practices of the community.

Recommendations 3

Enhanced Healthcare Access: Improve access to affordable and quality healthcare services in urban slums, including regular screenings, education, and treatment for MetS.

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