The Silent Epidemic: Low Muscle Mass and Its Growing Threat among South Asians

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Introduction

Low muscle mass percentage is a significant public health concern across different populations, with distinctive patterns observed in South Asians(SA). Due to their unique body composition profiles, they are at heightened vulnerability.

2 Objective

- Evaluate the prevalence of low muscle mass percentage across South Asian ethnicities
- culturally Provide insights into appropriate recommendations for interventions

3 Methodology

Design: Cross-sectional study

Subjects: 1659 SA participants (including Indian, Pakistani,

Nepalese, Sri Lankan, and Bangladeshi)

Recruitment: Territory-wide health outreach assessments between June 2022 and March 2025 was done by JCSATH team facilitated by 4 NGOs

Analysis: Descriptive analysis

Outcome: Bioelectrical impedance analysis, and collection

of demographic data (age, sex and ethnicity)

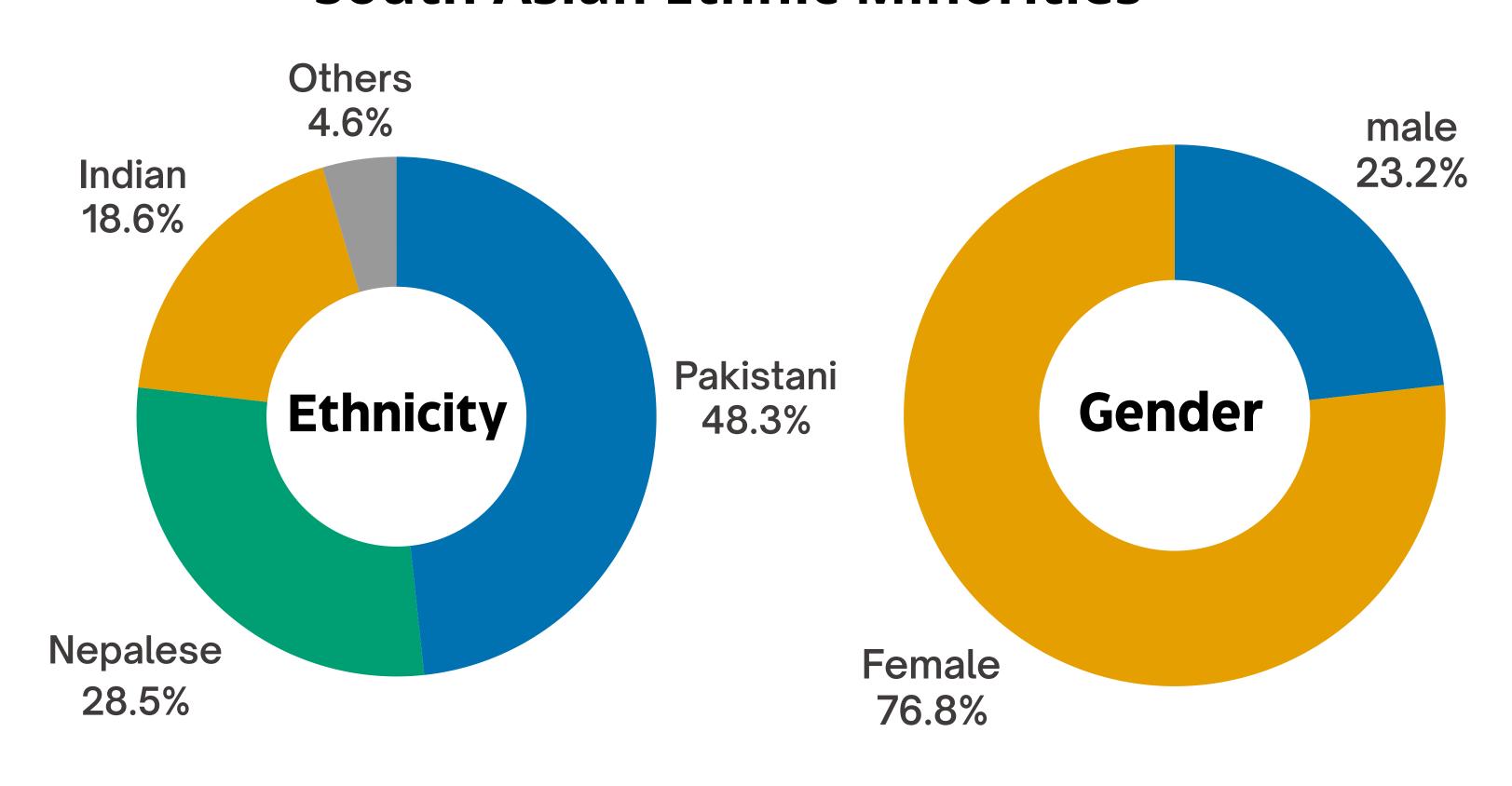
Diagnosis Criteria:

Low Muscle Mass: Omron HBF-514C were used to measure participant's muscle percentage

Muscle Mass Percentage Chart					
Gender	Age	Low(-)	Normal(0)	High(+)	Very High
Female	18-40	<24.4	24.4 - 30.2	30.3 - 35.2	≥35.3
	41-60	<24.2	24.2 - 30.3	30.4 - 35.3	≥35.4
	61-80	<24.0	24.0 - 29.8	29.9 - 34.8	≥34.9
Male	18-40	<33.4	33.4 - 39.4	39.5 - 44.1	≥44.2
	41-60	<33.2	33.2 - 39.2	39.3 - 43.9	≥44.0
	61-80	<33.0	33.0 - 38.7	38.8 - 43.4	≥43.5

Results

Demographic characteristics of the sampled **South Asian Ethnic Minorities**





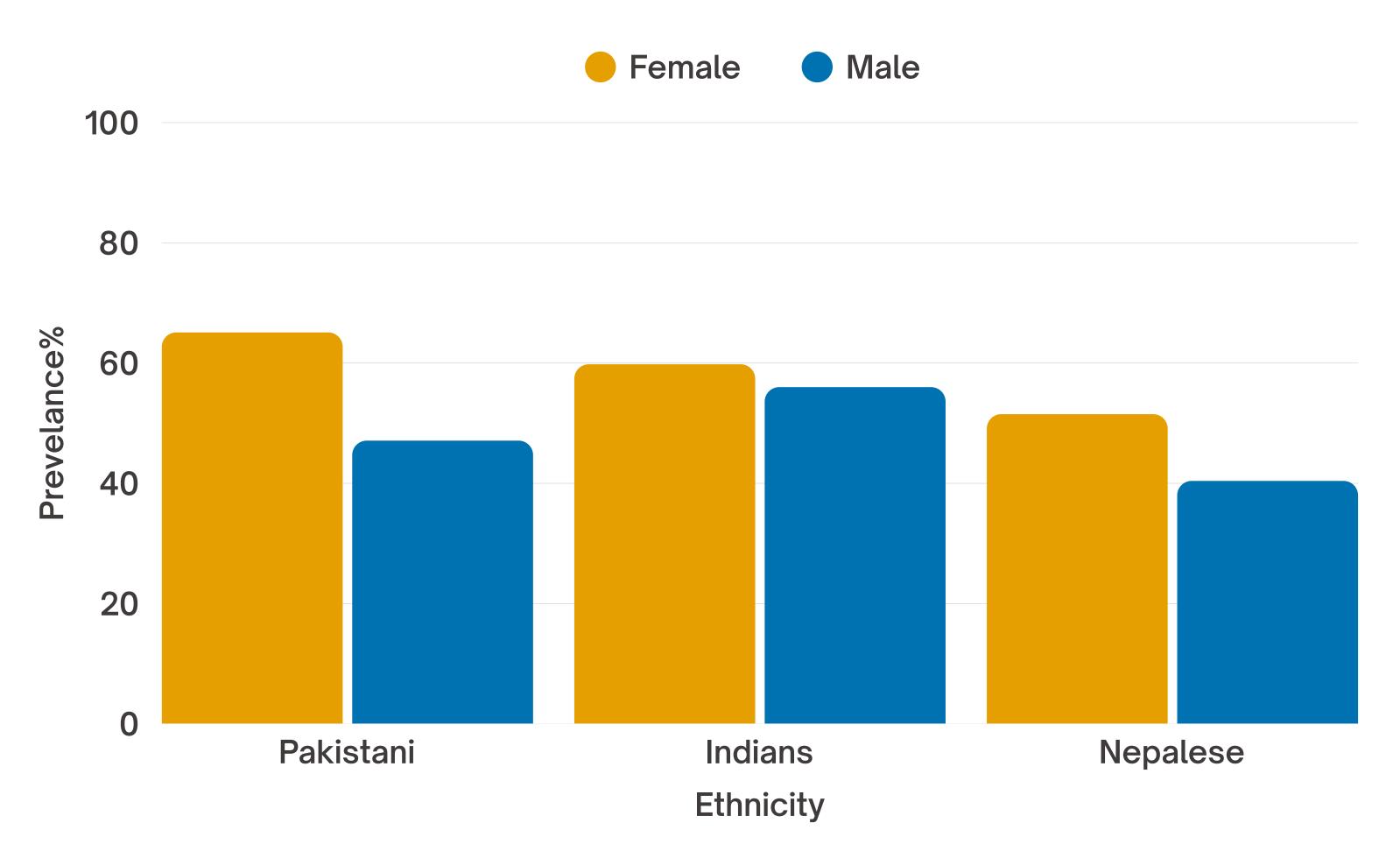


Figure 2A. Male Prevalence by Age Group

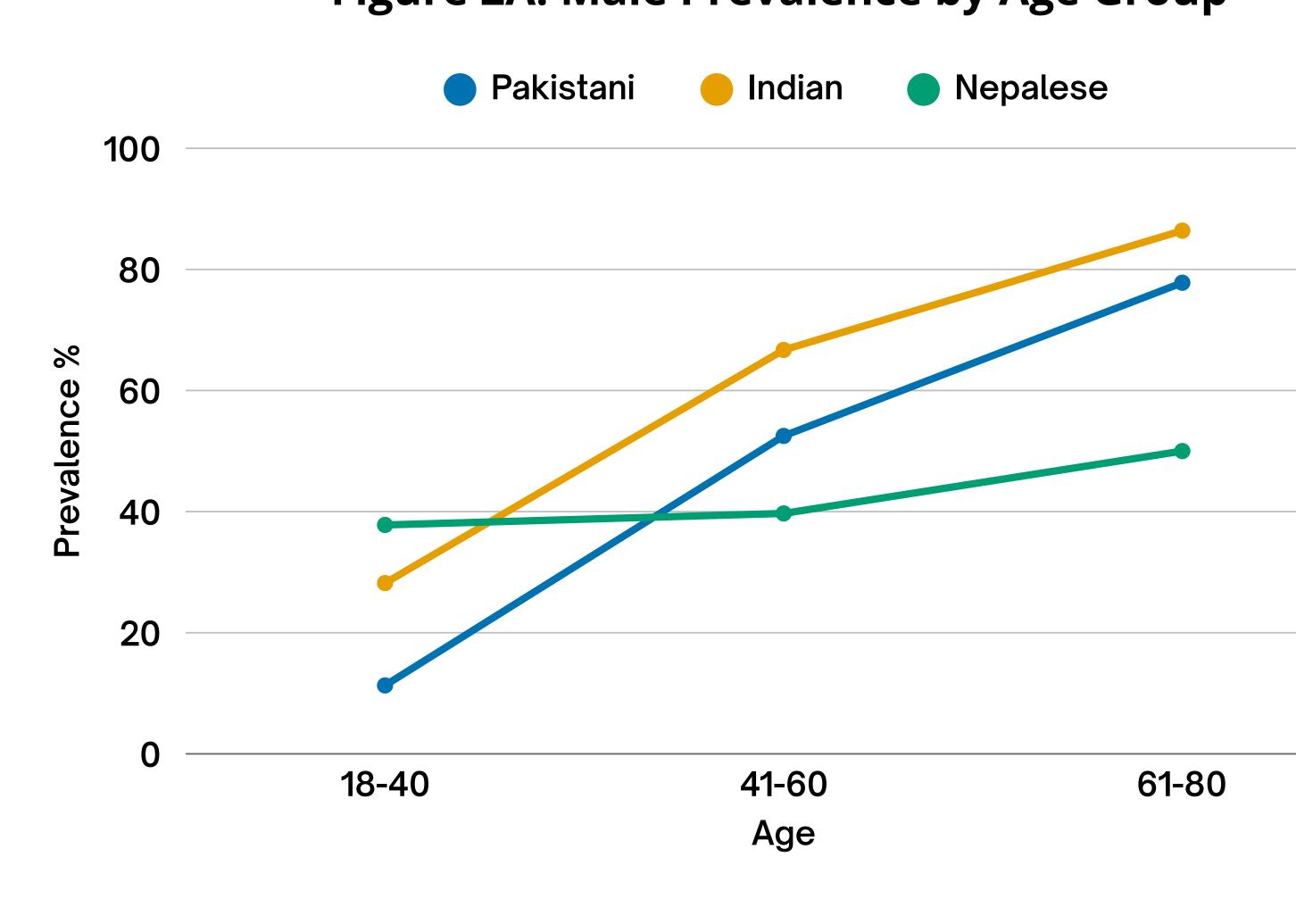
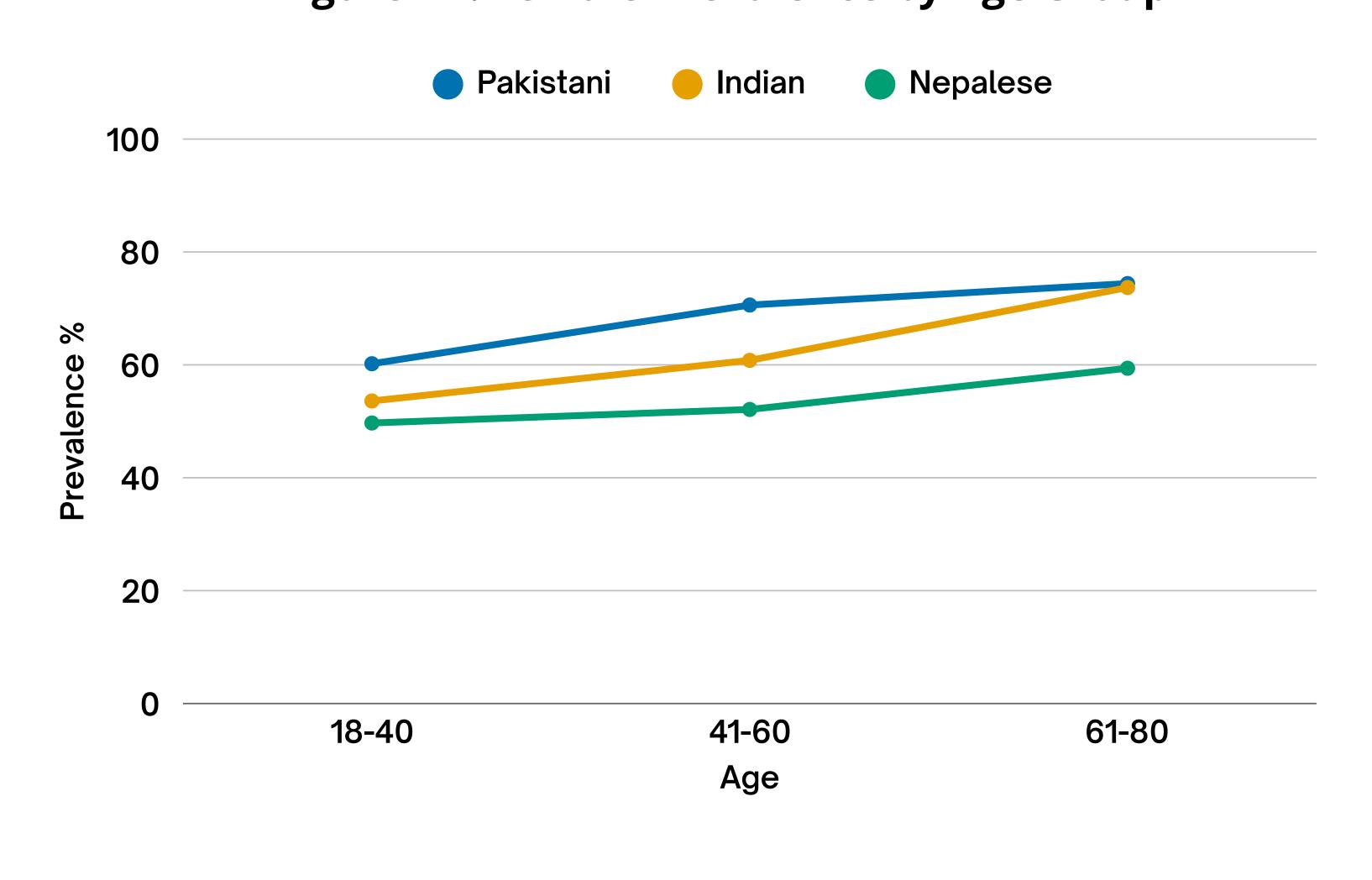


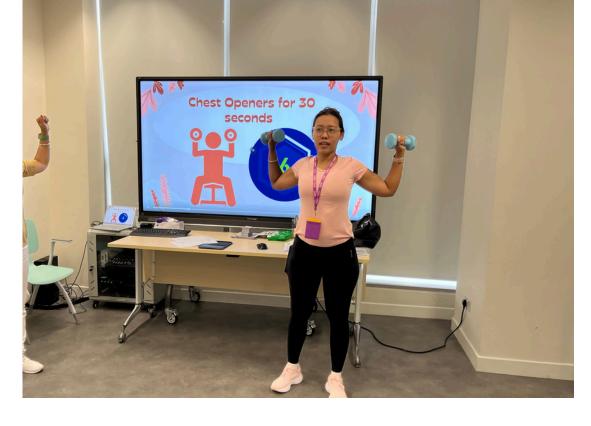
Figure 2B. Female Prevalence by Age Group



Conclusion

- Low muscle mass is a significant and under-recognized public health concern among South Asians (SA) in Hong Kong, which particularly affects Pakistani and Indian women and older adults compared to other groups.
- Prevalence increases with age, but is also high among young women.
- Culturally tailored interventions, including nutrition education, exercise, and targeted awareness campaigns, are urgently needed to address this emerging risk and reduce future health risks in these vulnerable populations

6 Follow-Up Support



Nutrition Education



Muscle Health Education

Affiliations









Jockey Club S.A.T.H. Project





