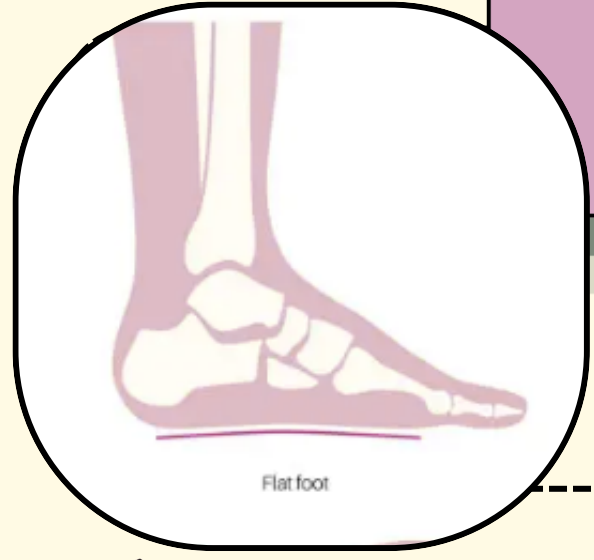


# PREVALENCE OF PES PLANUS IN GRADE 1 OBESITY:

ASSOCIATION WITH BMI, AGE, GENDER & PROLONGED STANDING OCCUPATIONS



*AUTHORS: Mahanaim Shakeel, Maham Siddiqui, Muntaha Siddique, Fatima Javed, Muhammad Amir*



## PES PLANUS

Collapse of medial longitudinal arch, due to several causes.  
i.e: Congenital, Obesity, Prolonged weight bearing/standing, Aging, Trauma .

### RESEARCH RATIONALE

- Increasing obesity linked to rising foot disorders.
- Pes planus impacts gait and musculoskeletal health.
- Limited local data on association of obesity with BMI, age, gender and prolonged standing occupations.

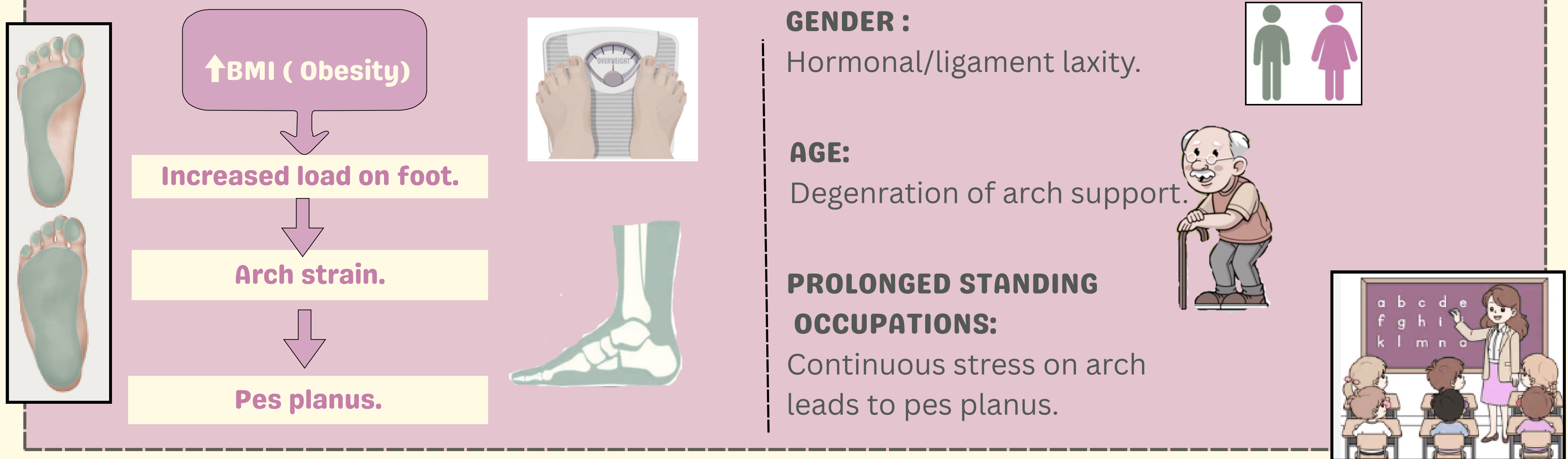
### PROBLEM STATEMENT

- Obesity increases strain on foot arches.
- Pes planus often goes undiagnosed.
- Standing jobs may increase risk.

### OBJECTIVES

- PRIMARY:** Determine prevalence of pes planus in grade 1 obesity.
- SECONDARY:** Assess association with
- BMI
  - Age
  - Gender
  - Prolonged standing occupations.

## ----- CONCEPTUAL FRAMEWORK -----



## ----- METHODOLOGY -----

### STUDY DESIGN & SETTING:

- Cross-sectional.
- Hospitals, local markets, Primary school facilities.

### POPULATION & SAMPLE:

- n= 378 participants

### DATA COLLECTION TOOLS:

- navicular drop test.
- structured proforma.

### SELECTION CRITERIA

#### Inclusion:

- Age 19-40 (BMI: 30-34.9)
- Grade 1 obesity.
- prolonged standing jobs.

#### Exclusion:

- prior foot surgery.
- neurological disorders.

### DATA ANALYSIS:

- Data will be analyzed using SPSS V.25
- Chi square test.
- Correlation.

### EXPECTED OUTCOMES

- Higher prevalence of pes planus in grade 1 obesity.
- Positive correlation with BMI, age and gender
- Increased risk in prolonged standing occupations.

### SIGNIFICANCE OF STUDY

- Early detection of pes planus = early screening & prevention.
- Occupational ergonomics & health strategies:
  - proper footwear.
  - weight management.
  - work-rest cycles.
  - proper floor surfaces.

