The social determinants of food consumption patterns and nutritional status of older persons in Zambia: A case of Milenge district, Luapula province.

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Introduction

• Africa: Youngest continent
• Low life expectancy → HIV epidemic (15-59 years)
• Growth of >60s fastest in world
• Health status under-prioritized → Limited data
Introduction

- Zambia life expectancy: 47 years (1990); 51.2 years (2010)
- Projection: 61.2 years (2035)
• To explore the nutritional, health and food security landscape of older people in Milenge district of Luapula Province, Zambia.
Objectives

• Nutritional status
• Food consumption patterns
• Health status
• Food Insecurity
• Socio-demographics
Methodology

• **Research design:** Cross sectional, descriptive
• **Study site:** Milenge district, Luapula province
• **Survey instrument:** Semi-structured questionnaires, anthropometry
• **Data Analysis:** SPSS 17.0; Bivariate Correlation; Descriptive analysis
• **Study population:** ≥ 50 years old (men & women)
Data collection

- Semi-structured Questionnaires:
  - Socio-demographic
  - Household Dietary Diversity
  - Health questionnaire
  - Household food insecurity access scale (HFIAS)
- Anthropometry
  - Height/Weight/BMI
  - Waist circumference/MUAC
<table>
<thead>
<tr>
<th>Study Characteristics</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age Range</strong></td>
<td>50 – 89 years</td>
</tr>
<tr>
<td><strong>Mean Age</strong></td>
<td>$62.27 \pm 9.77$ years</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
</tr>
<tr>
<td>None:</td>
<td>(53) 39.3%</td>
</tr>
<tr>
<td>Primary</td>
<td>(72) 53.3%</td>
</tr>
<tr>
<td>Secondary:</td>
<td>(10) 7.4%</td>
</tr>
<tr>
<td><strong>Gender (N =135)</strong></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>(67) 49.6%</td>
</tr>
<tr>
<td>Female</td>
<td>(68) 50.4%</td>
</tr>
<tr>
<td><strong>Employment</strong></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>(14 → 11 men; 3 women) 10.4%</td>
</tr>
<tr>
<td>Unemployed:</td>
<td>(120) 89.6%</td>
</tr>
<tr>
<td><strong>Type of Employment</strong></td>
<td></td>
</tr>
<tr>
<td>Shop Keeper</td>
<td>(3) 2.2%</td>
</tr>
<tr>
<td>Charcoal burner</td>
<td>(2) 1.5%</td>
</tr>
<tr>
<td>Farmer</td>
<td>(9) 6.7% (7 men, 2 women)</td>
</tr>
</tbody>
</table>
Results

**Nutritional status**

**Total:** 100% (N=135)
(28.9% underweight; 63.0% normal; 6.7% overweight; 1.5% obese)

**Gender:**

Men: 49.6% (N=67)
(26.9% underweight; 65.7% normal; 7.5% overweight)

Women: 50.4% (N=68)
(30.9% underweight; 60.3% normal; 5.9% overweight; 2.9% obese)
<table>
<thead>
<tr>
<th>Health Condition (n)</th>
<th>Underweight (&lt;18.5 kg/m²)</th>
<th>Normal (18.5 - 24.9 kg/m²)</th>
<th>Overweight (&gt; 25 kg/m²)</th>
<th>Obese (&gt; 30 kg/m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HBP (58)</td>
<td>24.1%</td>
<td>63.8%</td>
<td>8.6%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Heart Failure (12)</td>
<td>16.7</td>
<td>83.3</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Malaria (33)</td>
<td>48.5</td>
<td>42.4</td>
<td>6.1</td>
<td>3.0</td>
</tr>
<tr>
<td>Flu (67)</td>
<td>34.3</td>
<td>62.7</td>
<td>3.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Tuberculosis (48)</td>
<td>33.3</td>
<td>64.6</td>
<td>0.0</td>
<td>2.1</td>
</tr>
<tr>
<td>Pneumonia (33)</td>
<td>24.2</td>
<td>72.7</td>
<td>3.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Smoking (29)</td>
<td>51.7</td>
<td>41.4</td>
<td>6.9</td>
<td>0.0</td>
</tr>
<tr>
<td>Alcohol (29)</td>
<td>37.9</td>
<td>51.7</td>
<td>6.9</td>
<td>3.4</td>
</tr>
</tbody>
</table>
Results

Employment vs. BMI

- Employed: (N=14): 85.7% normal; 14.3% overweight
- No underweight
Results

Education vs. Food Consumption

Positive:
- bread (r=0.632; p=0.027)
- rice (r=0.248; p=0.008)
- okra (r=0.368; p=0.000)

Negative:
- Sweet potato leaves (r=-0.182; p=0.034)
- Small Fish (kapenta) (r=-0.460; p=0.024)
Results

Employment vs. Food Consumption

Employment

Positive:
- Bread ($r = 0.233; p=0.007$)
- Groundnuts ($r = 0.181; p=0.035$)
- Rape ($r = 0.195; p=0.023$)
- Pumpkin leaves ($r = 0.172; p=0.046$)
- Sugar (white/brown) ($r=0.271; p=0.001$)
- Fresh milk ($r = 0.246; p=0.004$)
- Cooking oil ($r = 0.199; p=0.021$)
- Chicken ($r=0.346; p=0.000$)
- Fizzy Drinks ($r = 0.222; p=0.010$)

Negative:
- Okra ($r = -0.179; p=0.038$)
- Small fish (kapenta) ($r=-0.192; p=0.025$)
Conclusion so far...

- Underweight more prevalent than overweight/obesity
- Obesity more likely in women
- Socioeconomic status influences food consumption patterns
Thank you for your attention!