Pica practices, Food cravings and Aversions among Pregnant Women in Kenya

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Note: for non-commercial purposes only
Introduction

- Pregnancy is an important stage which influences the wellbeing of future generations

- During this stage women are faced by different challenges
  - Consumption of non-food items (Pica) include soil/dirt (geophagia), ice (pagophagia), stones (lithophagia)
  - Food cravings
  - Food aversions or avoidance

Study design

- Face to face interview of 202 pregnant women who visited the Antenatal clinic in Kakamega district Hospital, Kenya
Results: Pica

- Pica prevalence was at 27.4%, with consumption of soft stones (43%), House construction soil (34%) termite soil (11.3%) and small amounts of ash
Results: Food cravings

- 73.8% of the respondents had food cravings, 72% craved more than one food

- It was highest in (48.9%) in the second trimester

- Most of the food craved for
  - Animal proteins (beef, fish, chicken and chicken eggs and milk)
  - Fruits (mangoes, bananas)
  - Starchy staples - rice, maize, maize meal (Ugali)

Kariuki, Lucy, et al. (2016):
48.7% of the respondents had food aversions

Foods avoided

- Small fish (Sardin/omena)
- Vegetables- Kale, cabbage, cowpea leaves
- Wheat products-Bread, mandazi (like berliner)

Kariuki, Lucy, et al. (2016)
## Results-Correlation with pica

<table>
<thead>
<tr>
<th>Variables</th>
<th>With-Pica practices =53 N(%)</th>
<th>Without-pica practices=149 N(%)</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary school</td>
<td>24 (44.4)</td>
<td>41 (27.9)</td>
<td>0.013*</td>
</tr>
<tr>
<td>Secondary school</td>
<td>20 (37.0)</td>
<td>48 (32.70)</td>
<td></td>
</tr>
<tr>
<td>College/university</td>
<td>10 (18.5)</td>
<td>58 (39.5)</td>
<td></td>
</tr>
<tr>
<td>Food cravings</td>
<td>43 (78.2)</td>
<td>100 (68.0)</td>
<td>0.158</td>
</tr>
<tr>
<td>Child death</td>
<td>12 (21.8)</td>
<td>7 (4.8)</td>
<td>0.000*</td>
</tr>
<tr>
<td>Iron and folate supplementation (IFAS)</td>
<td>49 (89.1)</td>
<td>125 (85.0)</td>
<td>0.458</td>
</tr>
<tr>
<td>Food aversions</td>
<td>26 (47.3)</td>
<td>72 (49.0)</td>
<td>0.829</td>
</tr>
<tr>
<td>WDDS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤4</td>
<td>41(74.5)</td>
<td>118(80.3)</td>
<td>0.376</td>
</tr>
<tr>
<td>&gt;4</td>
<td>14(25.5)</td>
<td>29(19.7)</td>
<td></td>
</tr>
</tbody>
</table>
### Results - correlation with pica

<table>
<thead>
<tr>
<th>Variables</th>
<th>Trimester pregnancy</th>
<th>With pica</th>
<th>Without pica</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hb (g/dl)</td>
<td>I</td>
<td>11.29±1.6 (12)</td>
<td>11.37±1.49 (40)</td>
<td>(0.654) NS</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>10.74±2.3 (27)</td>
<td>11.62±1.3 (55)</td>
<td>(0.771) NS</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>10.32±1.07 (11)</td>
<td>11.30±1.4 (31)</td>
<td>(0.032) *</td>
</tr>
</tbody>
</table>
Conclusion

• Food mostly craved were high in Energy, B vit, Fe, Mg and Vit A

• Reasons for food avoidance was mainly Nausea, vomiting, heartburn and dislike of taste and smell of food

• Pica was reported to be together with food but not exclusively

• Women with post secondary/college education consumed less pica

• Low Hb levels was correlated to group that practiced pica

Kariuki, Lucy, et al. (2016):
Recommendation

• Food cravings, aversions and pica practices should be assessed during Antenatal clinic

• Attention should be paid to women who have had a history of child death and women with low education

• No benefit for pica practice, habit should be discouraged
Thank you.