Factors affecting fruit and vegetable consumer behaviour among adults in sub-Saharan Africa: A rapid review

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Introduction and Objective

- Diets rich in fruit and vegetables (FV) provide promising solutions to micronutrient deficiencies and are associated with a reduced risk of developing non-communicable diseases.
- Consumption of FV in most low and middle income countries (LMICs), particularly in sub-Saharan Africa, is below the WHO recommendations of min 400 grams per day.
- What, where, when, how and why people choose to eat is influenced by various factors and requires an understanding of how individuals are embedded in their environments.
- In the sustainable food systems framework, consumer behaviour is acknowledged as an important entry point for food systems transformation towards improved diets.
- In order to develop effective interventions to increase FV consumption, the factors of consumer behaviour need to be better understood.

The aim of this rapid review is to assess and synthesise data on individual, social, physical and macro-level factors that affect fruit and vegetable consumption and purchase among adults living in Africa.

Methods

Conceptual framework

Guidelines and tools applied

- Cochrane recommendations for rapid review methods (Garritty et al., 2021)
- Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) (Liberati et al., 2009)
- Protocol has been developed and registered at PROSPERO
- Webtool: Cadima (www.cadima.info)
- Risk of bias tools: e.g. Appraisal tool for Cross-Sectional Studies (AXIS), New-Castle-Ottawa Scale (NOS) for case control and cohort studies

Ethical considerations

No ethical approval required as the review is a rapid assessment of existing literature.

Results

Figure 2: PRISMA diagram showing the information flow through the different phases of the review

- At title and abstract level most articles are from South Africa (43), followed by Nigeria (22), Tanzania (12) and Ghana (20) (see figure 3).
- Results show that economic status, age, gender, education, marital status, subjective knowledge about vegetables, cost, seasonality, consumers concern for food safety and regional differences are among the factors affecting FV intake and purchase.

Outlook

- The review will identify potential factors that affect consumption and purchase of FVs, if possible stratified for the subgroups gender and geographic location of studies.
- The results will identify areas for future research and contribute to the evidence base required to develop effective interventions to increase FV consumption in sub-Saharan Africa.

Table 1: Eligibility criteria based on Population, Exposure and Outcome (PEO)

<table>
<thead>
<tr>
<th>PEO</th>
<th>Inclusion</th>
<th>Exclusion</th>
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<tbody>
<tr>
<td>Population</td>
<td>Healthy adults, aged between 18 to 65 years</td>
<td>&lt; 18 or &gt; 65 years; in-patient/clinical population</td>
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<tr>
<td>Exposure</td>
<td>Individual, social, physical and macro – level factors (see figure 1)</td>
<td>Supplementation</td>
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<tr>
<td>Outcome</td>
<td>Type, quantity and diversity of FV consumed</td>
<td>Disease, anthropometric and biochemical nutritional status</td>
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<tr>
<td></td>
<td>Type, quantity, diversity of FV acquired/purchased</td>
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<td></td>
<td>Additional measured consumer practice, including where (e.g. location) when (e.g. season or month or day) how (e.g. the frequency) FV are consumed or purchased</td>
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<td>Context</td>
<td>All sub-Saharan African (SSA) countries, rural urban, peri-urban areas</td>
<td>Studies outside SSA</td>
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<td>Study design</td>
<td>Observational studies including cross-sectional, cohort or case-control study design.</td>
<td>Qualitative studies</td>
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<td></td>
<td>Experimental studies, including randomised controlled trials and quasi-experimental studies</td>
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<tr>
<td>Other</td>
<td>Language: English; Publication period: 2000 to 2021</td>
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</tbody>
</table>

References

Garritty et al. (2021): Rapid review methods group offers evidence-informed guidance to conduct rapid reviews. Journal of Clinical Epidemiology, 136: 10-22
