Dietary Habits and Living Arrangements Among Adults with Intellectual Disabilities

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Presenter Disclosures

Sumithra Murthy

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☐ No relationships to disclose

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Background

- Dietary habits, physical activity and obesity are strong modifiable risk factors for chronic diseases such as cardiovascular diseases, diabetes and some cancers.
- People with ID often have poor dietary habits.
- Living environment exerts a powerful influence on dietary habits and choices, especially in adults with ID.
- Supervision, amount of care/support, nutritional guidance and freedom of choice in different living arrangements affect the dietary intake.

Elinder et al 2010; Draheim et al., 2007; Rimmer & Yamaki, 2006.

Background

- Considerable research in dietary intake differences between adults with ID living in large institutional settings and community settings done.
- Limited research is done on the dietary behavior differences among the different community settings such as living independently, living with family and living in group home settings.

Melville et al 2008; Rimmer et al 2004

State-Specific Trends in Fruit and Vegetable Consumption Among Adults --- United States, 2000--2009

Source: Behavioral Risk Factor Surveillance System, 2009
Research Questions

1. What is the prevalence of the dietary risk behaviors in adults with intellectual disabilities?
2. Do the dietary behaviors among adults with intellectual disabilities vary with the living arrangements?

Methods

- Cross-sectional design: Baseline data (N=1,619) of the Longitudinal Health and Intellectual Disability Study
- Survey Instrument: Longitudinal Health and Intellectual Disability Survey (LHIDS)
- Data collection: Mixed modes (paper or online)

Survey Instrument

- LHIDS was adapted from Behavioral Risk Factors Surveillance Survey (BRFSS) and National Health Interview Survey (NHIS)
- Three sections:
  - Health & Function (health status, chronic health conditions, physical function, health care access)
  - Health Behaviors (physical activity, weight control & dietary habits, smoking, alcohol, oral hygiene, social participation)
  - Sociodemographics (characteristics, employment/day services)
**Measures**

- **Dietary risk behaviors**
  - Inadequate fruit & vegetable intake: <3 servings per day
  - High cholesterol/fat intake: ≥3 servings per day
  - Fast Food consumption: ≥1 time per week
  - Unhealthy snacking (e.g., potato chips, corn chips, pretzels): ≥1 time a day
  - Sweetened soda drinking: ≥1 can (12 oz) per day
  - Table salt addition to food: Most or all of the time

- **Living Arrangements by Support Level:**
  - Living independently (living on their own/supportive living)
  - Living with family/relatives/guardian
  - Living in a foster home/group home

**Data Analysis**

- **Research question 1**
  - The prevalence of the dietary risk behaviors
    - Frequencies

- **Research question 2**
  - Dietary Risk Behavior by Living Arrangements
    - (Chi Square test)
Demographics (N=1,619)

Level of ID
- Borderline: 13%
- Mild: 32%
- Moderate: 24%
- Severe/Profound: 9%
- Unknown: 22%

Special Olympics Participation
- Yes: 46%
- No: 54%

Demographics (N=1,619)

Body Weight Status
- Underweight: 4%
- Overweight: 38%
- Obese: 29%
- Normal: 25%

Results

RQ #1
What is the prevalence of the dietary risk behaviors in adults with ID?
Dietary Risk Behaviors in LHIDS participants

- Insufficient F & V intake
- Foods high in cholesterol/Fat intake
- Fast Food
- Unhealthy Snacks
- Sweetened Soda
- Addition of table salt to food

Notes: Inadequate fruit & vegetable intake: <3 servings per day
High cholesterol/fat intake: ≥3 servings per day
Fast food dining: Eating ≥1 times per week from fast food restaurants
Unhealthy snacking (e.g., potato chips, corn chips, pretzels): ≥1 time a day
Drinking soda: ≥1 can of non-diet soda per day
Table salt addition: Most or all of the time

Results

RQ #2
Do the dietary behaviors among adults with ID vary with the living arrangements?

Insufficient F & V intake by living arrangements

- Living independently
- Living with family
- Foster home/Group home

Inadequate fruit & vegetable intake: <3 servings per day
p<0.001
High cholesterol/fatty foods intake by living arrangements

- Living independently: 31.3%
- Living with family: 27.4%
- Foster home/group home: 26.9%

Fast food consumption by living arrangements

- Living independently: 68.5%
- Living with family: 66.0%
- Foster home/group home: 49.4%

Fast food consumption: ≥ 1 time per week
p < 0.05

Snacking by living arrangements

- Living independently: 47.8%
- Living with family: 48.0%
- Foster home/group home: 42.3%

Unhealthy snacking (e.g., potato chips, corn chips, pretzels): ≥1 time a day
Sweetened soda drinking by living arrangements

<table>
<thead>
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<th>Living arrangement</th>
<th>Percentage</th>
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<tr>
<td>Living with family</td>
<td>27.0%</td>
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<tr>
<td>Foster home/Group home</td>
<td>17.1%</td>
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</table>

Table salt addition to food by living arrangements

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<tr>
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<tr>
<td>Foster home/Group home</td>
<td>5.1%</td>
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</tbody>
</table>

Conclusion

- Adults with ID who lived independently or with family, as compared to those who lived in a foster/group home, were more likely to have
  - an inadequate daily intake of fruits and vegetables,
  - more sweetened soda consumption,
  - more fast food intake
Limitations

- Record bias
- Limited racial diversity in the sample population
- Cross-sectional survey

Recommendations

- Programs promoting health by targeting healthy dietary habits and choices are needed, especially those who live independently or with family
  - Education of adults with ID and their caregivers on dietary practices
  - Provision of support to adults with ID and their caregivers
    - Assessment of needs
    - Dietary planning
    - Follow-up

Website and Contact Information

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