

HEALTH KNOWLEDGE AND LITERACY OF DEAF ADOLESCENTS WHO USE SIGN LANGUAGE: FORMATIVE RESEARCH FINDINGS



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BACKGROUND

- Even when well-educated, many deaf people who use sign language face significant health literacy barriers
 - Deaf people's health literacy barriers are likely leading to poorer health outcomes
 - Higher rates of cardiovascular risks than people who are not deaf
 - Because adolescence appears to be a critical period to develop lifelong health literacy skills, we explored deaf adolescents' cardiovascular health knowledge and literacy skills
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METHODS – DATA COLLECTION

- **3 focus groups with 17 deaf high school students to collect information about their cardiovascular health knowledge and literacy**



- **Conducted in sign language**
- **Video recorded, translated, and transcribed into written English**
- **Brief background survey administered to all participants**
 - **General and deafness-related socio-demographic information**
 - **Self-reported functional literacy skills**

METHODS – DATA ANALYSIS

- Analyzed survey data to assess relationships between deaf adolescents' demographic and deafness-related characteristics with their self-reported functional literacy skills
 - Analyzed focus group interview data to identify:
 - Specific gaps in knowledge about common cardiovascular health facts and risks (content analysis)
 - Emerging domains influencing critical and interactive health literacy skills (thematic analysis)
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RESULTS – QUANTITATIVE ANALYSIS OF SURVEY DATA

- Similarly to people who are not deaf, male gender and race/ethnicity other than White (but not age or grade) appear to be related to deaf adolescents self-reporting weaker functional literacy skills
 - However, deaf adolescents' self-reported functional literacy skills also appear to be significantly influenced by their perceived quality of communication with their parents
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RESULTS - CONTENT ANALYSIS OF INTERVIEW DATA

- Regardless of their self-reported English reading skills, many deaf adolescents appear to have superficial knowledge about cardiovascular health facts and risks
 - Significant knowledge gaps
 - <25% were able to approximate what a heart attack was
 - <10% were able to explain what cholesterol is
 - Misinformation
 - >50% thought that the amount of salt in their diet was unimportant for their health
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RESULTS -

CONTENT ANALYSIS OF INTERVIEW DATA

- As a result, many deaf adolescents are unable to link their knowledge about discrete health facts to synthesize a higher level understanding that would allow them to confidently translate their knowledge into well-informed health decisions
 - Q: "So to keep your heart healthy for the future, would you choose to eat more red meat, white meat, vegetables, or fruits?"
 - A: "I think I would eat more red meat and everything else, but I'm not really sure"
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RESULTS - THEMATIC ANALYSIS OF INTERVIEW DATA

- Deaf adolescents describe many barriers to accessing, understanding, and applying health information
 - Lack of confidence
 - Insufficient visual information
 - Information not easily understandable
 - Unable or unwilling to seek out health information from health-literate people who are hearing
 - Communication and social barriers
 - Sometimes, mistrust of hearing people
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RESULTS - THEMATIC ANALYSIS OF INTERVIEW DATA

- As a result, many deaf adolescents appear not to be exposed to experiences that might prompt themselves to recognize their health literacy skills and undertake actions to overcome their weaknesses
 - “I never really thought about these stuff, like how things like this could really affect my health and life, until we talked about it. You know, nobody ever took the time to break down this information for me before. Now, I know I need to learn more.”
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CONCLUSIONS

- Deaf high school students who use sign language
 - Confirm that their health literacy challenges begin before adulthood
 - Highlight the importance of being exposed to stimuli that would prompt them to realize their health literacy gaps
 - Emphasize using sign language and other visual information to effectively communicate with and teach them essential health information and health literacy skills



THANK YOU VERY MUCH FOR YOUR ATTENTION AND FEEDBACK!!!