

Oral Abstract Plenary #2

Monday, November 1st, 1:40 pm—2:40 pm ET

Contributions of Health Information Accessibility to Health Literacy among Deaf Individuals

McKee, Michael¹, Chandanabhumma, Paul¹, Ratakonda, Samantha², Panko, Tiffany³, Hauser, Peter³

¹University of Michigan, ²Tulane University Medical School, ³Rochester Institute of Technology

Background

Research has shown that Deaf individuals face significant barriers in accessing, understanding and utilizing health information to promote their well-being, particularly in the online health context. However, little is known about how Deaf individuals navigate health information, including perceived source of reliable information, modality preferences and information search approaches. Moreover, it is unclear the extent to which similarities or differences in these perceived experiences contribute to disparities in health literacy between Deaf and hearing individuals.

Research Question

How do Deaf and hearing individuals access and navigate online health information? How do Deaf and hearing individuals' experiences and perceptions contribute to differences in health literacy outcomes?

Method

We selected a purposive sample of 26 Deaf and hearing participants with adequate and inadequate health literacy determined from Newest Vital Sign (NVS) tool to participate in semi-structured elicitation interviews to explore how (and why) participants access and understand online health information. Participants included 16 deaf and 10 hearing adults from Flint, MI, Rochester, NY and Chicago, IL who participated in a larger health literacy study between 2016-2019. Participants were presented with four clinical scenarios with brief assessments and follow-up questions to understand participants' information search patterns and health literacy outcomes. Thematic analysis was conducted using Dedoose software to identify preferred information source, modality preferences and navigation patterns among Deaf and hearing individuals with adequate and inadequate health literacy.

Results

Findings suggested that (a) information search patterns, (b) preferences for information source and (c) dissemination approach differed among Deaf and hearing participants and among those with adequate and inadequate health literacy. Participants with adequate health literacy primarily searched for multiple sources of health information by themselves, whereas individuals with inadequate health literacy preferred seeking help from others in their network (e.g., family and friends). Participants with inadequate health literacy seemed to indicate preferences for illustrations, particularly among Deaf participants who reported challenges with excessive texts and longer paragraphs. While hearing participants did not recommend specific dissemination approaches, Deaf participants often expressed preferences for ASL videos, online support groups, and community events with augmented sign language support.

Conclusions

Our findings suggest that differences in healthcare navigation experiences and barriers may explain differences in health outcomes among Deaf and hearing individuals. The unique challenges faced by Deaf individuals associated with both processing health information and locating trustworthy informational support may help explain their risk for inadequate health literacy.

Implications

Online health information should be presented in an accessible manner that is tailored to the Deaf community's modality preferences and navigation patterns. Improving accessibility to and establishing effective relationships with health care professionals may also be consistent with informational support preferences among individuals with inadequate health literacy. Future studies should explore effective approaches to disseminate information among Deaf individuals, including those with inadequate health literacy.

Factors associated with HPV vaccination decision making among Korean American mothers

Tsao-Wu, Lauren¹, Chepkorir, Joyline¹

¹Johns Hopkins

Background

Korean American women have one of the highest cervical cancer burdens among women in the US, yet vaccination rates against human papillomavirus (HPV),

the cervical cancer-causing agent, remain low. Compared to all major racial and ethnic groups in the US, Asian-American adolescent girls have the lowest uptake and completion rates of HPV vaccinations. An association between parental decision-making and vaccination of adolescent girls has been established. However, there is limited literature describing the influence of sociodemographic characteristics and health literacy factors on HPV vaccine decision-making. The purpose of this study was to assess the factors associated with the willingness of Korean American women to allow their daughters to receive the HPV vaccine.

Research Question

How are sociodemographic characteristics and health literacy factors associated with HPV vaccine decision-making among Korean American mothers?

Methods

We used baseline data collected from 560 Korean American women who participated in a cluster-randomized trial destined to promote mammogram and Pap test screening. Using a health literacy framework, we analyzed information on sociodemographic characteristics, cancer literacy, HPV knowledge, and HPV vaccination decision making for their daughters. Logistic regression analysis was conducted to identify correlates of HPV vaccination decision making among participants.

Results

Over half of participants (53.8%) reported they were willing to allow their daughters to receive HPV vaccination, whereas 43.8% reported they were uncertain, and 2.5% reported they were unwilling. Participants had generally low HPV knowledge and low cancer literacy levels; 41.8% scored 0 on the HPV Knowledge test and 15.7% scored 0 on Cancer Literacy test. In logistic regression analysis, we found higher education (AOR = 0.6; CI = 0.4, 0.9), middle-range cancer literacy (AOR = 1.69, 95% CI = 1.08, 2.68), and middle- and high-range HPV knowledge (AOR = 2.14, 95% CI = 1.46, 3.12 and AOR = 3.48, 95% CI = 2.01 respectively) were significantly associated with higher odds of willingness to vaccinate daughters. English proficiency, marital status, income comfortability, age and insurance status were not associated with willingness to allow daughters to receive the HPV vaccine. Among

participants who reported they were uncertain or unwilling to allow their daughters to receive HPV vaccination, the two most common reasons were concerns about vaccine efficacy and uncertainty of the side effects of the vaccine.

Conclusions

Limited HPV knowledge and low cervical cancer literacy persist among Korean American women. Bridging the knowledge gap that exists in this population could increase their endorsement of the HPV vaccine and increase vaccine uptake rates for Korean American adolescent girls.

Implications

Our findings underscore the need to provide culturally appropriate educational materials on HPV, cervical cancer, and HPV vaccine to Korean American women. The efficacy and side effects of the vaccine need to be clearly communicated by clinicians to increase the likelihood of Korean American women to allow their daughters to receive HPV vaccine against cervical cancer. Future research should examine interventions to enhance HPV vaccine uptake in the Korean American population.

Relations among race, health literacy, and structural factors in health care to HIV viral load

Waldrop, Drenna¹, Ownby, Raymond L²

¹Emory University, ²Nova Southeastern University

The HIV/AIDS epidemic has achieved tremendous gains in the treatment of this once terminal condition. Unfortunately, however, these gains are not reflected equally across the US. The Deep South has the largest number of new infections and persons living with HIV in the US. Black Americans are disproportionately affected by HIV/AIDS, particularly in the Deep South, and are also disproportionately impacted by low health literacy. Given the additional factors faced by Black Americans in the Deep South that may also impact HIV treatment, the current study assessed a model testing patient, sociological risk and protective factors and their relation to HIV viral load in a model that accounts for race and health literacy.

Data were collected from men and women living with HIV residing in the metro-Atlanta area. Recruitment took place from 2012 -2017 from local HIV care clinics. Data

were collected via ACASI and personal interview and included demographics, measures of health literacy, neighborhood characteristics, drug use, medication management, insurance status, HIV stigma, social support, healthcare discrimination, and HIV viral load at the baseline visit. HIV viral load data were gathered from electronic medical records. Log viral load copies/mL was the outcome of interest.

A total of 700 PWH were enrolled in the study. Participants were 69% cisgender men, 28% cisgender women, and 2% transgender women. Sixty percent were Black and 50% were 50 years old and older. Multiple relationships were assessed. The final model indicated that log HIV viral load - was associated with all variables tested except internalized HIV stigma, social support and medication management. Black persons living with HIV with lower health literacy had greater viral load.

Findings from this study indicate that health literacy and race remain important indicators of HIV viral load and that a number of additional relations can be considered systemic challenges. Perceived healthcare discrimination, education, neighborhood characteristics, and insurance status were associated with HIV viral load and suggest that societal barriers, rather than personal barriers, likely influence persistent disparities in HIV outcomes. Given the chronicity of HIV, whether these same variables are predictive of sustained viral suppression over time, the ultimate goal of HIV treatment, is an important area for future study.

Examining the interplay of health literacy, healthcare access, and health service utilisation and their association with oral health status among older persons

Amoah, Padmore A¹

¹Lingnan University, Hong Kong

Background

Public knowledge on health issues and the extent of health services access are considered critical to the oral health of older persons. However, the relationship between these factors and their association with other correlates of oral health are a subject of budding research in low-, and middle-income countries. Therefore, this article examines the mediational role of access to healthcare (also used as a predictor), general health status and health behaviour (routine body check-up) in the relations between health literacy HL and oral health status of older persons in Ghana. It also examines

the gender differences in the mediational role of these factors.

Methods

The study analysed responses from 457 persons aged 50years and older located in five regions in Ghana. Path analyses in structural equation modelling (SEM) was used to examine the specified relationships.

Results

Health literacy ($\beta = 0.153, p < 0.001$), general health status ($\beta = 0.183, p < 0.001$), and routine check-up ($\beta = 0.127, p < 0.01$), were associated with oral health status. General health status mediated the association between health literacy and oral health status ($\beta = 0.050, p < 0.01$). Access to healthcare was associated with oral health status through general health status ($\beta = 0.019, p < 0.01$), and routine check-up ($\beta = 0.024, p < 0.01$). Further analysis showed that the mediational role of routine check-up in the association between access to healthcare and oral health status was significantly stronger among males ($\beta = 0.061, p < 0.001$) than females ($\beta = 0.050, p > 0.05$).

Conclusion

The interplay of health literacy, healthcare access, and health service utilisation behaviours must be critically analysed to inform health and social policy strategies aimed at improving the oral health of older persons.