

# **Do older Hispanic diabetics use the internet for health-related information?**

Kathleen M. Nokes, PhD, RN, FAAN  
Judith Aponte, PhD, RN

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# SLIDE #2: Disclosure

- Nokes & Aponte are associated with Hunter College, CUNY, Hunter-Bellevue School of Nursing, New York, NY.
- Learner objectives:
  - identify differences in eHealth literacy between older male and female Hispanics with Type 2 diabetes.
  - identify how clinicians can support older Hispanics with diabetes to use the internet to access health-related information.
- No sponsorship or commercial support was given to either authors

# Assumptions

- Health literacy influences a person's ability to engage in self- management
- The internet can be a resource for providing diabetes-related information for people to self-manage their diabetes more effectively

# Purpose

- The purpose of this mixed method descriptive study was to provide insight about how older Hispanics' with type 2 diabetes use the internet to access diabetes-related information.

# Convergent mixed methods design

- *Quantitative data:*
  - Electronic health literacy. Measured by the E-Health Literacy Scale (e-HEALS) which assesses perceived skill and confidence in using the internet for gathering and acquiring health-related information (Norman and Skinner, 2006). E-HEALS was translated into Spanish for this research.
  - Demographic, diabetes-related, and smart phone use data were also collected.
- *Qualitative data:*
  - Focus groups that further explored how electronic health literacy impacts on accessing diabetes and diabetes-related health information

# Setting

- Publicly funded Senior Center in East Harlem, a neighborhood in New York City, which regularly services about 100 older adults who are 60 years of age and older
- East Harlem is one of the 10 Manhattan neighborhoods with large Hispanic populations where more than half of that population (51%) identifies as Hispanic

# Sample (N=20)

- equally divided between men and women
- average participant was 74 years; born in Puerto Rico; preferred to speak in Spanish; lived with diabetes an average of 17 years and took medications to manage their diabetes.
- the average participant had a smart phone for 3 years; made or received 3 calls daily; texted less than once daily; and 75% were either very or somewhat concerned with privacy and texting.

E-HEALS: items 1 & 2 used separately;  
items 3 through 10 are combined.  
mean =22.35 (SD=12.96); range: 8 to  
40; Cronbach's alpha= 0.989

e-HEALS item	Item mean (SD)
1. How useful do you feel the Internet is in helping you in making decisions about your health?	2.95 (1.63)
2. How important is it for you to be able to access health resources on the Internet?	2.90 (1.58)
3. I know what health resources are available on the Internet.	2.90 (1.65)
4. I know where to find helpful health resources on the Internet.	2.85 (1.69)
5. I know how to find helpful health resources on the Internet.	2.95 (1.79)
6. I know how to use the Internet to answer my questions about health.	2.50 (1.39)
7. I know how to use the health information I find on the Internet to help me.	2.70( 1.71)
8. I have the skills I need to evaluate the health resources I find on the Internet.	2.90 (1.74)
9. I can tell high quality health resources from low quality health resources on the Internet.	2.65 (1.66)
10. I feel confident in using information from the Internet to make health decisions.	2.90 (1.74)



# Focus groups: yielded 5 themes

- Useful information source
- Family and friends help
- Complex and confusing
- Type words and get information
- Improved self-management

# *Useful information source*

Source: 10 female and three male participants

Sample quotes:

“The internet is useful to me; sometimes it answers my questions because I am able to get information about my diabetes or anything else”

“I use the internet for information about insulin and testing your sugar”

“I used it to know more about my disease of diabetes”

*Internet is useful for looking up new and current medications and its side-effects, overall health and diabetes information, and in providing additional information.*

# *Family and friends help*

Source: seven men and one woman

Sample quotes:

“Either my daughter or son go into the internet for me and looks things up when I have questions about diabetes”

“I ask my wife to read it and then to tell me”

“I don’t know how to use the internet, I see my wife just types diabetes and gets information and she looks for me”

“My son looks in the internet for me.”

*Many, mostly men, depended on either a son/daughter or spouse to help them with accessing and interpreting diabetes-related information from the internet.*

# Complex and confusing

Source: six women and seven men

Sample quotes:

“The words in the internet... I can’t understand. The words they use are too hard, they give information like the only people going on the internet are doctors”

“The information is too complicated for me”

“I don’t use the internet too much so I’m not too bright”

“It does not give me too much information since it is confusing and hard to understand”

“There is a lot of information and I don’t know what the information means”

“Most of the information I don’t understand and that is the main reason I don’t use the internet more.”

*Many felt the internet was overwhelming, confusing and complex preventing them from using it for diabetes-related information.*

# Type words and get information

Source: five women

Sample quotes:

“Sometimes I go into each of the things that come up in the first and second page and whatever is repeated must be right”

“I can’t explain where because I like them, you know, just type words and get information”

“I go into different links”

“I go into all of the sites that pop-up and whatever information I read over and over again that is the same that feel is true”

*All of the respondents used different internet methods to access and verify diabetes-related information.*

# Improved self-management

Source: three women and three men

Sample quotes:

“Now I eat less and try to eat better”

“I try to now walk more than I use to and eat healthier”

“I try to eat more fruits and vegetables”

“The information lets me understand why I feel pain in my feet”

“I check information on my pills and know I need to take them every day like the doctor told me.”

*Participants identified that the internet assisted them in improving their health-related behaviors.*

# Gender differences

- T-tests were computed between the male and female scores on e-HEALS and, although the sample size was small, significant differences were found in that men were significantly less likely to access the internet compared to women (means=13.85 (9.69) and 25.77 (10.22) respectively) ( $t=-2.67$ ,  $df=18$ ,  $p=.015$ ). This finding is validated in the *Family and friends help theme*.

# Next steps

- Continue to validate the Spanish-language version of the e-HEALS with a Hispanic population.
- Develop culturally tailored, perhaps gender specific, interventions to improve electronic health literacy in a chronically ill ethnic minority population in order to improve overall health status.