

Reasons, assessments, and actions taken: A national study of consumer use of Internet health information

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* Thank you for your interest in this presentation. Please note that analyses included herein are preliminary. More recent, finalized analyses can be found in: Ybarra, M., & Suman, M. (2006). Reasons, assessments, and actions taken: Sex and age differences in uses of Internet health information. *Health Education Research*, or by contacting ISK for further information.



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Background

- ◆ Access to reliable disease information online has been linked to
 - Reduced anxiety (Gufstason, Hawkins, Boberg et al., 2002).
 - Increased feelings of self-efficacy
- ◆ 48% of health information seekers indicate that their findings help them to take better care of themselves (Fox, Rainie, Horrigan et al., 2000).
- ◆ 41% of adolescents have changed their behavior because of information they found online (Kaiser Family Foundation, 2002).

Problem statement and Study question

The Internet's influence on health care consumers is likely to only increase, necessitating more information about the seeking experience.

Personal characteristics may significantly influence Internet health information seeking behavior.

Study questions:

- ✓ *What are the common reasons, assessments and actions taken as a result of Internet health information*
- ✓ *How do the RAAs vary by sex and age?*

Surveying the Digital Future Year 4 Methodology

- ◆ Conducted by the Center for the Digital Future, University of Southern California
- ◆ N = 2,010
- ◆ 4th year of a longitudinal telephone survey
- ◆ Nationally representative (EPSEM)
- ◆ Conducted in summer 2003
- ◆ Inclusion criteria:
 - Over the age of 12 years
 - Speak either English or Spanish
 - Consent to participation

Statistical methods

1. Valid answer to Internet use, N=2,007
2. Missing data imputed using best-set regression (Stata 7)
3. Differences by sex and age were investigated via chi-square tests.

Measures

1. **Reasons:** Open-ended question about why respondent chose the Internet to look for health or medical information. Coded into 6 categories.
2. **Assessments:** 10 statements were read aloud and respondents rated how much they agreed with each statement (5-point Likert scale).
3. **Actions / results:** Respondents asked if they engaged in each of 5 activities (yes / no).

Study sample characteristics (N=2,007)

Demographic characteristics	Non-Internet users (N=548)	Internet users, non-health information seekers (N=640)	Health information seekers (N=819)	Statistical Comparison
Race				$\chi^2=35.7$ (8)***
White	82.1% (450)	79.7% (510)	88.6% (726)	
Black	7.1% (39)	8.3% (53)	3.9% (32)	
Asian	0.4% (2)	1.9% (12)	1.8% (15)	
American Indian	1.8% (10)	1.4% (9)	1.2% (10)	
Other	8.6% (47)	8.8% (56)	4.4% (36)	
Hispanic ethnicity	11.0% (60)	8.3% (53)	5.6% (46)	$\chi^2=13.0$ (2)**
Female	63.7% (349)	52.5% (336)	64.6% (529)	$\chi^2=25.2$ (2)***
Age [M (SD)]	61.1 (18.1)	40.7 (19.0)	45.9 (15.2)	$F=5.3$ (82)***
Income (\$80,000+)	3.7% (20)	18.9% (121)	24.7% (202)	$\chi^2=104.5$ (2)***

*p-value<.05; **p-value<.01; ***p-value<.001

Internet use and health information seeking

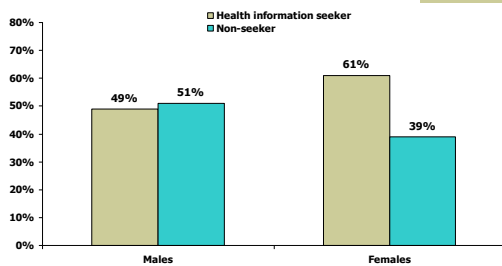
- 72% of all respondents were Internet users
- 56% of Internet users were health information seekers (41% of all respondents)

Internet use by sex and age (N=2,007)

	Health information seekers (N=819)	Internet users, non-health information seekers (N=640)	Non-Internet users (N=548)
	% (N)	% (N)	% (N)
Age			
Adolescents (12-19 yrs)	23 (37)	72 (114)	5 (8)
Young adults (20-39 yrs)	47 (235)	40 (201)	13 (67)
Middle age (40-59 yrs)	53 (388)	27 (203)	20 (148)
Older adults (60+ yrs)	26 (159)	20 (122)	54 (325)
Sex			
Men	37 (290)	38 (304)	25 (199)
Women	44 (529)	28 (336)	29 (349)

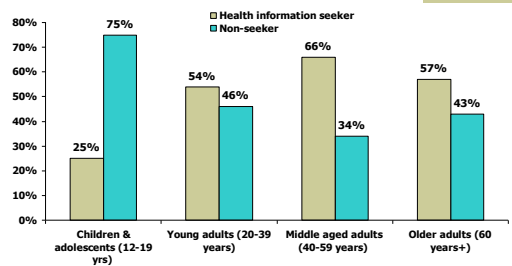
Percentages sum to 100% across the row

Internet health information seeking by sex among Internet users (N=1,459)



$\chi^2(1) = 21.8$ $p < .001$

Internet health information seeking by age among Internet users (N=1,459)



$\chi^2(3) = 84.0$ $p\text{-value} < .001$

The health information seeking experience (N=819)

Reasons

- 75%: to search about a personal health problem
- 70%: to search about a loved one's health problem
- 4%: privacy / embarrassing topic

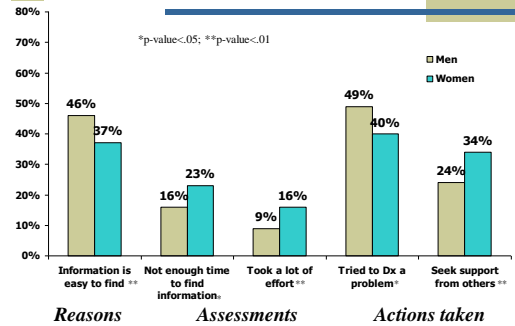
Assessments

- 73% satisfied with information found
- 21% concerned about the quality of information
- 8% information too hard to understand

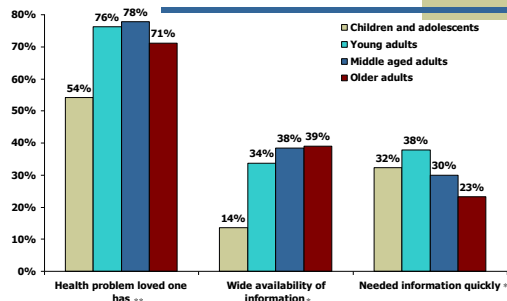
Action taken / results

- 55% contacted a healthcare provider
- 78% felt more comfortable about information from a healthcare provider

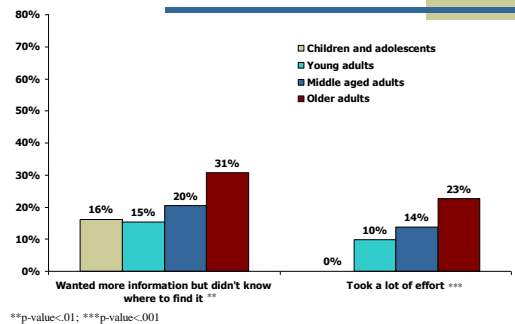
Internet health information seeking by sex (N=819)



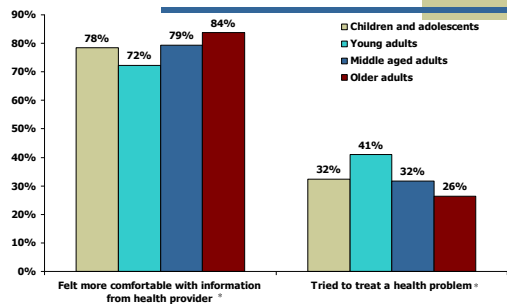
Internet health information seeking by age: Reasons (N=819)



Internet health information seeking by age: Assessments (N=819)



Internet health information seeking by age: Results / Actions taken (N=819)



*p-value<.05

Study Limitations

The current investigation does not include medical conditions or treatment outcomes.

Data do not provide enough detail to disentangle reasons why consumers sought medical care / support.

Conclusions: Age

As age increases, so too does the likelihood of reporting:

- The reason for using the Internet was the wide availability of information

But also,

- The search took a lot of effort and
- More information was wanted but the consumer didn't know where to find it.

Conclusions: Sex

Men and women were equally likely to be searching for information about a personal problem as well as a loved one's health problem.

Women were significantly more likely to report a negative assessment of the seeking experience than men.



Implications: Medical Care

One in two seekers contact a physician because of information found online.

No difference in likelihood of seeking medical care was noted by sex or age.

Health behavior and perceptions of health services received are likely influenced by information found online, which may vary by sex and age.



Implications: Intervention and prevention

Although we tend to think of the Internet as a young person's tool, it may be a viable delivery method for older adults too.

The Internet is being used by caregivers. "Multiple hit" interventions should be considered.



Questions

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